

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTSUBMIT IN TRIPLICATE\*  
(Other instructions on  
reverse side)Form approved.  
Budget Bureau No. 1004-0136  
Expires: December 31, 1991

## APPLICATION FOR PERMIT TO DRILL OR DEEPEN

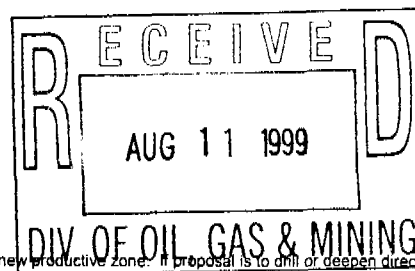
1 a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/>				5. LEASE DESIGNATION AND SERIAL NO. UTU-58434	
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> <input checked="" type="checkbox"/> OTHER - COALBED METHANE SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>				6. IF INDIAN, ALLOTTEES OR TRIBE NAME	
2. NAME OF OPERATOR ANADARKO PETROLEUM CORPORATION				7. UNIT AGREEMENT NAME	
3. ADDRESS AND TELEPHONE NO. 17001 Northchase Drive, Houston, Texas 77060 281/875-1101				8. FARM OR LEASE NAME WELL NO. Helper Federal A-6	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.) At surface 1275 FSL 933 FEL, SE Section 23, T13S R10E At proposed prod. zone 1275 FSL 933 FEL, SE Section 23, T13S R10E				9. API WELL NO.	
				10. FIELD AND POOL OR WILDCAT Helper CBM	
				11. SEC. T.R.M. OR BLK. AND SURVEY OR AREA Section 23, T13S R10E	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE. 9 miles North of Price, Ut				12. COUNTY Carbon	13. STATE Utah
15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)		933'	16. NO. OF ACRES IN LEASE 631'	17. NO. OF ACRES ASSIGNED TO THIS WELL. 160	
18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.		3106'	19. PROPOSED DEPTH 4200'	20. ROTARY OR CABLE TOOLS Rotary	
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 6474' GL				22. APPROX. DATE WORK WILL START. October 1 1999	
23. PROPOSED CASING AND CEMENTING PROGRAM					
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT	
12 1/4"	8 5/8" J-55	24#	300'	200 cu. ft.	
7-7/8"	5-1/2" N80	17#	4200	300 cu. ft.	

Attached is the following:

1. Survey Plat
2. Drilling Plan with BOP Schematic, Figure 1-1
3. Surface Use Plan
4. Certification of Operator
5. Topo & Access Map & Area Map.
6. Pit & Pad Layout with cross sections of pit, pad, & rig layout.

CONFIDENTIAL

The Cultural Resource Study was submitted under separate cover.

Nationwide BLM Oil & Gas Lease Bond Number 153571  
Utah Oil & Gas Lease Bond 224351 (expiration date 06-30-2000)  
Utah Bond of Lessee 203521

IN ABOVE SPACE, DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED Judy Davidson TITLE Judy Davidson  
Regulatory Analyst DATE 08/10/1999

(This space for Federal or State office use.)

PERMIT NO. 43-007-30593 APPROVAL DATE \_\_\_\_\_

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. CONDITIONS OF APPROVAL IF ANY:

APPROVED BY Bradley G. Hill TITLE BRADLEY G. HILL  
RECLAMATION SPECIALIST III DATE 8/19/99Federal Approval of this  
Action is Necessary

See Instructions On Reverse Side

**T13S, R10E, S.L.B.&M.**

N89°36'W - 40.06 (G.L.O.)

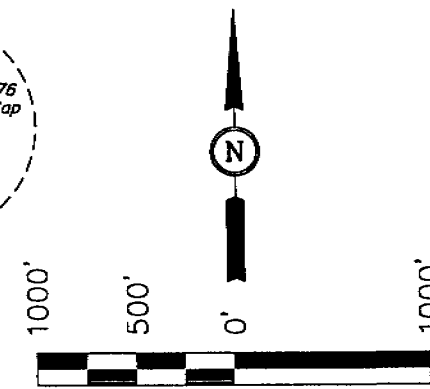
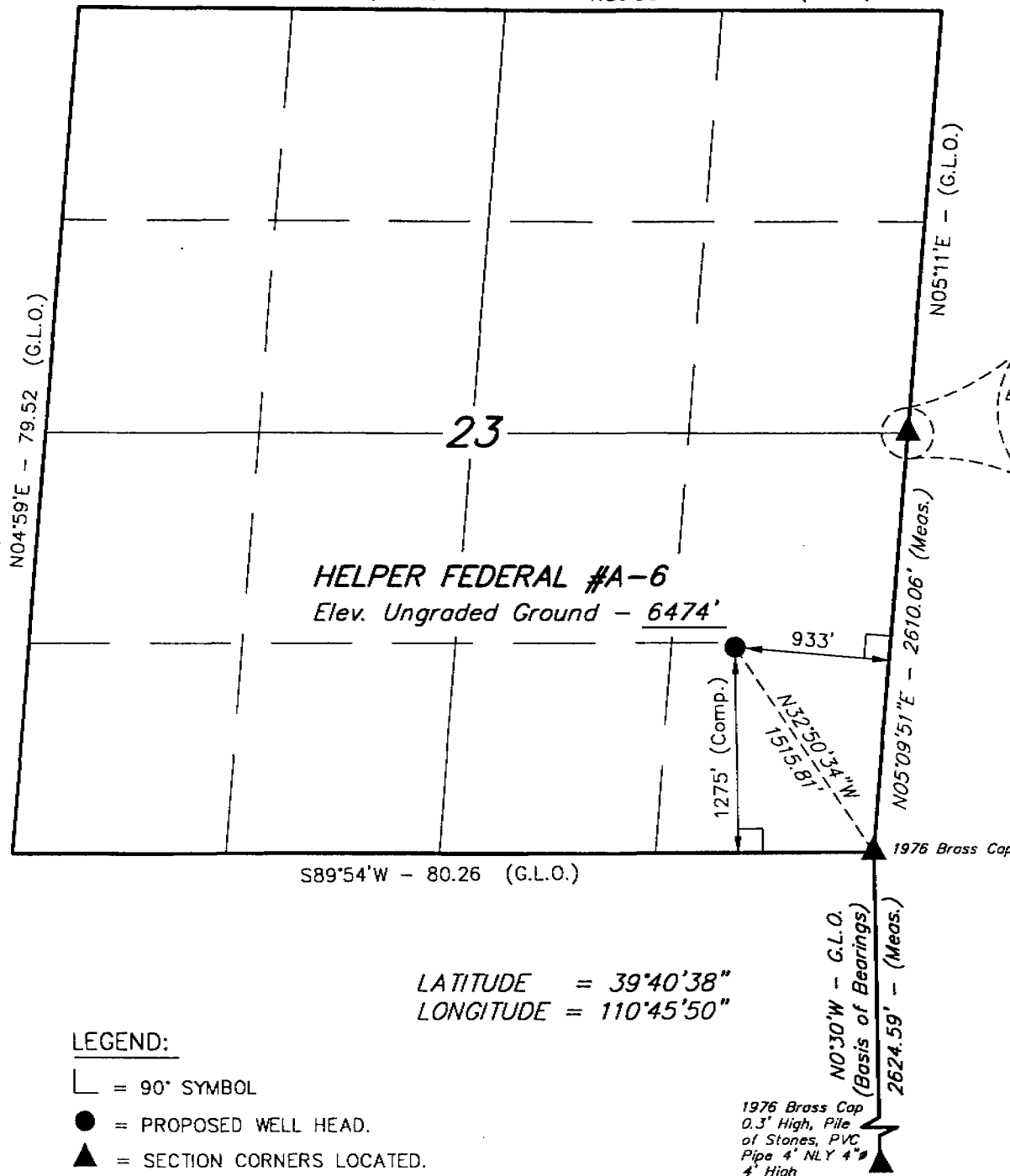
N89°50'W - 40.39 (G.L.O.)

**ANADARKO PETROLEUM CORP.**

Well Location, HELPER FEDERAL #A-6, located as shown in the SE 1/4 SE 1/4 of Section 23, T13S, R10E, S.L.B.&M. Carbon County, Utah.

**BASIS OF ELEVATION**

SPOT ELEVATION AT A ROAD INTERSECTION IN THE SW 1/4 OF SECTION 23, T13S, R10E, S.L.B.&M. TAKEN FROM THE HELPER QUADRANGLE, UTAH, CARBON COUNTY, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 6484 FEET.



**CERTIFICATE**

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

*Robert J. Kay*  
REGISTERED LAND SURVEYOR  
REGISTRATION NO. 161319  
STATE OF UTAH

**UINTAH ENGINEERING & LAND SURVEYING**  
85 SOUTH 200 EAST - VERNAL, UTAH 84078  
(435) 789-1017

**LEGEND:**

- └─┘ = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.

SCALE 1" = 1000'	DATE SURVEYED: 5-23-99	DATE DRAWN: 5-25-99
PARTY J.F. J.J. D.COX	REFERENCES G.L.O. PLAT	
WEATHER WARM	FILE ANADARKO PETROLEUM CORP.	

August 10, 1999



Bureau of Land Management  
82 East Dogwood  
Moab, Utah 84532

Attention: Eric Jones

RE: Applications for Permit to Drill  
Carbon County

Gentlemen:

Enclosed, in triplicate, are Applications for Permit to Drill (Form 3160-3) for the following wells in Carbon County. In addition, one copy of the application has been forwarded to the Price River Resources Area Field Office and two copies to the State of Utah Division of Oil, Gas & Mining.

Helper Federal A-6  
Helper Federal D-7  
Helper Federal D-8

Estimated start-up date to begin drilling the first well is on or about October 1, 1999. Please call me at (281) 874-8766 if you require further information or have any questions.

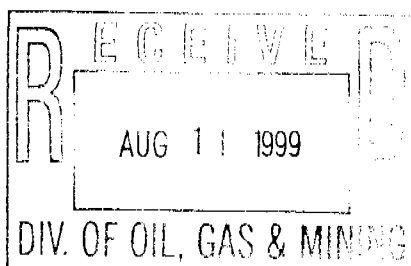
Sincerely,

Judy Davidson  
Regulatory Analyst

JD/me  
enclosures

cc: Bureau of Land Management  
900 North, 700 East  
Price, Utah 84501

State of Utah  
Division of Oil, Gas & Mining  
1594 West North Temple, #1210  
Salt Lake City, Utah 84114



**DRILLING PLAN  
TO ACCOMPANY APPLICATION FOR PERMIT TO DRILL**

Company: Anadarko Petroleum Corporation

Well: Helper Federal A-6

Location: 1275 FSL& 933FEL  
T13S R10E Sec 23  
Carbon County, Utah

Lease: U-58434

Surface Elevation: 6474

**A. Estimated Tops of Important Geologic Markers:**

<u>GEOLOGIC MARKER</u>	<u>DEPTH</u>
Emery	Surface
Bluegate Shale	2594
Ferron SS Member	3694
Ferron Coal Top	3709
Base of Ferron Coal	3839
Tununk Shale	3929

**B. Estimated Depth at which Water, Oil, Gas or other Mineral-Bearing zones are expected to be encountered:**

Gas-bearing Ferron Sandstone Member is expected to be encountered from: 3694 - 3839.

All fresh water zones and prospectively valuable mineral zones encountered during drilling will be recorded by depth and adequately protected. All oil and gas shows will be tested to determine commercial potential.

**C. Pressure Control Equipment:**

A 9" 3000 psi WP double gate hydraulic BOP with pipe rams and blind rams will be installed on the 8-5/8" casinghead. In addition to the BOP stack, a rotating head will be installed on top of the BOP to assist in safe air drilling operations. The BOP stack will be tested prior to drilling below surface casing. The ram preventers will be tested to 70% of the working pressure of the casinghead. The annular will be tested to 50% of its working pressure. Operational checks will be made daily or on trips. A BOP schematic is shown on attached Exhibit "A".

The BOP system will be consistent with API RP 53. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place. Blowout preventer controls will be installed prior to drilling the surface casing plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and operated at least daily to ensure good mechanical working order. This inspection will be recorded on the daily drilling report. Preventers will be pressure tested before drilling casing cement plugs. The accumulator system will meet IADC guidelines concerning pump capacities, storage capacity, and reservoir volume. Closing unit fluid volume will be sufficient to pre-charge the system to operating pressure plus 50% excess. One set of controls will be in the doghouse on the rig floor and one set will be remote on the drilling pad.

**D. Casing Program**

Surface Casing: 8-5/8", 24#, J55, LTC new casing will be set at approximately 300'.  
Production Casing: 5-1/2" 17#, N80, LTC, new casing will be set at TD if productive.

D. Casing Program (continued)

Casing Design Factors

The safety factors on casing strings will equal or exceed the following values:

Collapse	1.0
Joint Strength	1.6
Burst	1.33

E. Cement Program

Surface - Cement will be circulated to the surface. Casing will be cemented with approximately 200 cu. ft. of API Class 'G' cement.

Production - Casing will be cemented with approximately 300 cu. ft. of API Class 'G' cement. The actual cement volume will be based upon hole depth and gauge, and will be determined from logs.

Additional additives will be used to retard the cement, accelerate the cement, control lost circulation, or control fluid loss. All cementing will be done in accordance with API cementing practices.

F. Mud Program and Circulating Medium:

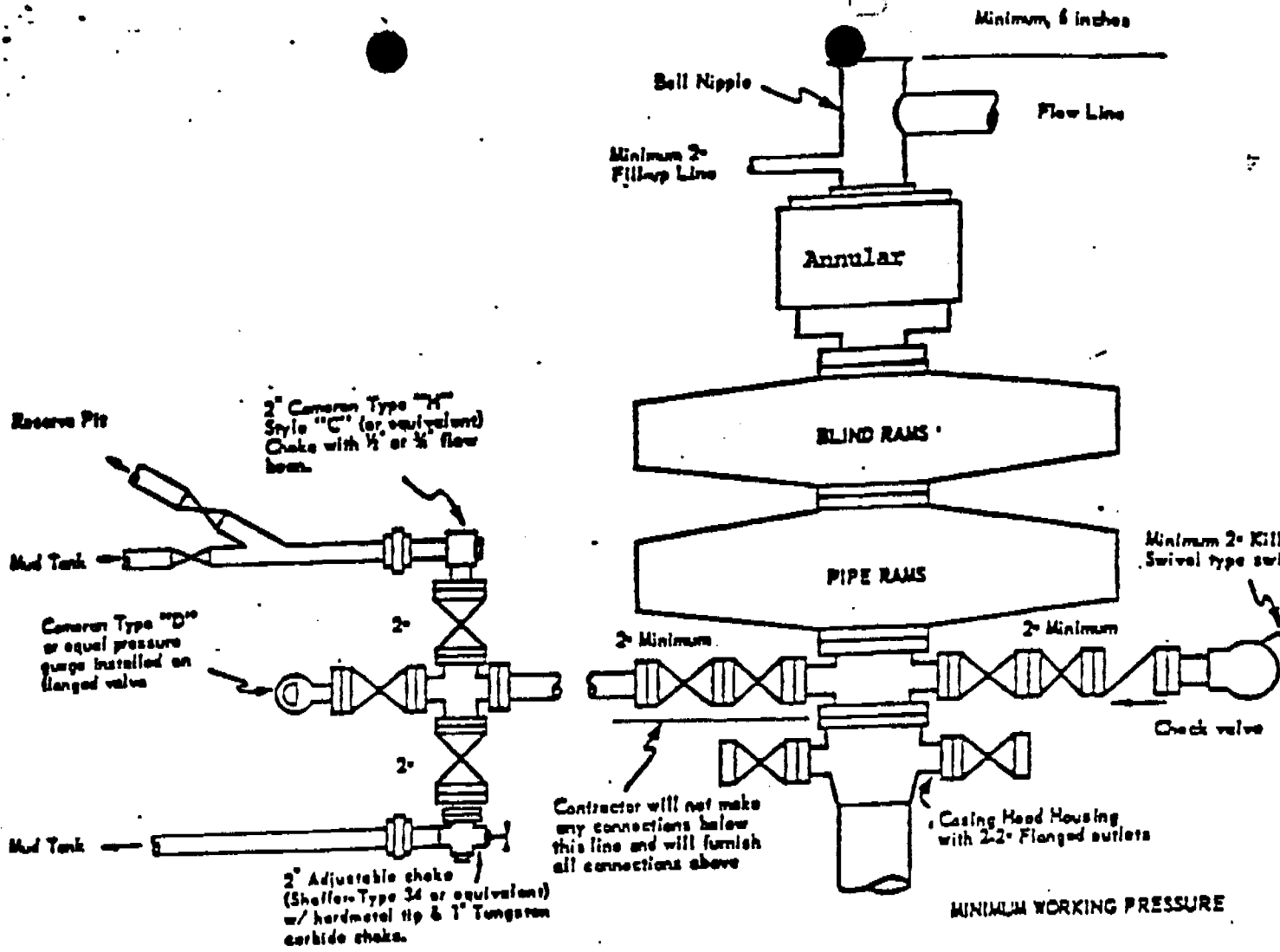
A truck-mounted air drilling rig will be used to drill the surface hole to 300' and to pre-set the surface casing before moving a drilling rig on location to drill the rest of the hole to TD. An air or air/mist system will be used for drilling from below surface pipe at 400' to TD. The mud/fluid system will be monitored visually and with a gas chromatograph detector.

G. Coring, Logging, and Testing Program:

- a. Rotary sidewall coring in the Ferron Sandstone interval may be performed, depending upon shows and hole conditions.
- b. DST's may be run depending upon shows.
- c. The following logging program is planned:
  1. SDL-GR-CAL over prospective intervals..
  2. DIL- SP-GR-CAL over prospective intervals
- d. A mud logging unit with chromatograph will be used from approximately 1000' to TD.
- e. After production casing is installed, a cement bond log will be run to determine the top of cement. Productive zones will then be perforated and swab tested. Water produced during testing will be contained in the temporary reserve pit. All produced oil will be stored and sold. Gas will be flared during testing.

H. Abnormal Conditions and Potential Hazards:

Abnormal conditions such as abnormal temperatures or pressures are not anticipated. Potential hazards such as H<sub>2</sub>S are also not anticipated.



MINIMUM BLOWOUT PREVENTER  
REQUIREMENTS - NORMAL  
PRESSURE SERVICE

## **SURFACE USE PLAN**

**Anadarko Petroleum Corporation  
Ferron Natural Gas Project  
Helper Field  
Carbon Co., Utah**

1. Existing Roads: (Please reference Topo, Access, and Area Map)

- a. Location of the proposed well is approximately 2-3 miles north of Price, Utah.
- b. Proposed route to location: (Reference Topo, Access, and Area Map).
- c. Location and description of roads in the area: (Reference Topo, Access, and Area Map).
- d. Plans for improvement and/or maintenance of existing roads: The existing roads will be maintained in the same or better condition as existed prior to the commencement of operations and in accordance with the Ferron Natural Gas EIS.

2. Planned Access Roads:

- a. Access Roads will be constructed using standard equipment and techniques such as the crown-and-ditch method (BLM 1989). Heavy equipment will clear vegetation and topsoil materials from the road surface. Both materials will be windrowed for future redistribution during reclamation. All roads will be constructed with , adequate drainage and erosion control features/structures (e.g., cut and fill slopes and drainage ditch stabilization, relief and drainage culverts, water bars, wing ditches, and rip-rap). When needed, four inches of sand and gravel will be placed on newly constructed roads to provide a year round travel way surface. The maximum disturbed width will not exceed 30' with a sixteen foot running surface. Dust will be controlled by the use of water or an approved dust retardant, as directed by the Price Field Office Manager. All roads will be maintained in as good or better condition than existing condition and in accordance with the Ferron Natural Gas EIS.
- b. Maximum grades: Maximum road grades will not exceed 15%.
- c. Location: New roads that will be constructed for access off of the existing roads are flagged. (Refer to submitted Topographic, Access, and Area Maps).
- d. Drainage: The road surface will be center crowned with ditches on each side of road. Slopes will have a maximum slope of 3:1.
- e. Culverts will be used where necessary during the drilling phase of operations. Further evaluation will be made for the additions of culverts if the road is to have long-term use.
- f. Surface materials (source): Surface materials will be most likely not be required to be transported to the access road or drillpad for construction purposes. However, if gravel is required, the dirt contractor will be responsible for locating and permitting of any necessary construction material.

3. Locations of existing wells:

**Helper Field - Ferron Natural Gas Project**

**Existing Well Locations**

<b>Well Name</b>	<b>Location</b>	<b>Sec</b>	<b>Twn</b>	<b>Rng</b>
Federal A-1	SW 1141'FSL & 1325'FWL	23	13S	10E
Federal A-2	1464 FSL & 2244 FWL	22	13S	10E
Federal A-3	1271 FSL & 324 FEL	22	13S	10E
Federal B-5	1139 FNL & 629 FEL	27	13S	10E
Federal C-1	2169 FNL & 697 FEL	22	13S	10E
Federal B-1	1650 FSL & 2310	33	13S	10E
Federal D-1	SW NE 1413' FNL & 1567' FEL	26	13S	10E
State A-1	NW 1621' FNL & 2019' FWL	3	14S	10E
State D-7	SW 1500' FSL & 1200' FWL	4	14S	10E
Birch A-1	SW 1507' FSL & 856' FWL	5	14S	10E
State D-3	691' FNL & 1006' FEL	5	14S	10E
State D-6	1300' FSL & 999' FEL	5	14S	10E
Helper Federal F-3	698' FNL & 1302' FEL	8	14S	10E
Helper Federal F-4	1294' FNL & 1182' FWL	9	14S	10E
Helper State A-2	1321' FNL & 464' FEL	3	14S	10E
Helper State A-3	1200' FNL & 900' FWL	2	14S	10E
Helper State A-4	1100' FNL & 1700' FEL	2	14S	10E
Helper State A-5	1816' FSL & 2201' FWL	3	14S	10E
Helper State A-6	2288' FSL & 820' FEL	3	14S	10E
Helper State A-7	1635' FSL & 1497' FWL	2	14S	10E
Helper State A-8	1700' FSL & 2000' FEL	2	14S	10E
Helper State A-9	1335' FNL & 1602' FWL	10	14S	10E
Helper State B-1	1595' FNL & 1406' FEL	9	14S	10E
Helper State D-4	1681' FNL & 1232' FWL	4	14S	10E
Helper State D-5	644' FNL & 2165' FEL	4	14S	10E
Helper State D-8	1059' FSL & 395' FEL	4	14S	10E
Birch A-2	945' FNL & 825' FWL	8	14S	10E
Helper SWD #1	1131' FSL & 2194' FWL	3	14S	10E
HELPER STATE A-10	1275' FNL & 2306' FEL	10	14S	10E
HELPER STATE A-11	1450' FNL & 1206' FWL	11	14S	10E
HELPER STATE A-12	2130' FSL & 1180' FWL	10	14S	10E
HELPER STATE A-13	2431' FSL & 736' FEL	10	14S	10E
HELPER STATE B-2	2438' FSL & 1090' FEL	9	14S	10E
HELPER STATE D-1	1131' FNL & 429' FEL	6	14S	10E
HELPER STATE D-2	1000' FNL & 2058' FWL	5	14S	10E
VEA A-1	1731' FNL & 1291' FWL	32	13S	10E
VEA A-2	1307' FNL & 842' FEL	32	13S	10E
VEA A-3	700' FSL & 1641' FWL	32	13S	10E
VEA A-4	1000' FNL & 2058' FWL	32	13S	10E
CHUBBUCK A-1	2017' FSL & 676' FEL	31	13S	10E



4. Location of Tank Batteries and Production Facilities:

All permanent (on site for six months or longer) structures constructed or installed (including oil well pumpjacks) will be painted a flat, non-reflective, earthtone color to match the standard environmental colors, as determined by the Rocky Mountain 5-State Interagency Committee and in accordance with the EIS for the Ferron Natural Gas Project. This will include all facilities except those required to comply with O.S.H.A. (Occupational Safety and Health Act) regulations. These will be painted the color stipulated by O.S.H.A. All facilities will be painted within six months of installation.

All site security guidelines identified in 43 CFR 3162.7 regulations will be adhered to.

If at any time, any off-lease storage, off-lease measurement, or commingling on-lease or off-lease occurs, there shall first be prior written approval from the AO.

Gas meter runs for each well, if needed, will be located within 500 feet of the wellhead. the gas flowline will be buried from the wellhead to the meter and 500 feet downstream of the meter run or any production facilities. Meter runs will be housed and/or fenced.

The oil and gas measurement facilities will be installed on each well location. The oil and gas meters will be calibrated in place prior to any deliveries. Test for meter accuracy will be conducted monthly for the first three months on new meter installations and at least quarterly thereafter. The AO will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports will be submitted to Price Field Office. All meter measurement facilities will conform with the API standards for liquid hydrocarbons and the AGA standard for natural gas measurement.

5. Location and Type of Water Supply:

Water supply for drilling and completion purposes will be furnished by a water hauler and will be obtained from the Price River Municipal Water District located nearby.

6. Source of Construction Material:

Native material will be used for road surfacing and pad construction. Should additional construction material be required, it will be the responsibility of the dirt contractor to locate and permit (if necessary) use of that material. The use of materials under BLM jurisdiction will conform to 43 CFR 3610.2-3 and the EIS for the Ferron Natural Gas Project..

7. Methods of Handling Waste Disposal

All reserve pits will be lined.

Produced waste water will be confined to a lined pits for a period not to exceed 90-days after initial production.

Trash will be confined in covered containers and hauled to an approved landfill. Burning of waste or oil is not approved, and spoil material will be kept on site for recontouring.

No bore holes will be used for disposal of waste materials. Human waste will be contained and will be disposed of at an approved sanitary landfill.

8. Ancillary Facilities:

Associated roads, pipelines, and electric lines will be installed as per attached Figure 2-1.

9. Wellsite Layout:

*Please refer to the submitted site layout diagram.*

The locations and access roads will be cleared of trees prior to any construction. Stumps will be scattered or buried in an area designated by the BLM. Any stump left in place will be cut so that the stump height does not exceed 12 inches. All slash less than four inches in diameter will be chipped or scattered outside the cleared area and must be within 24 inches of the ground at all points. All material four inches in diameter or greater will be removed from Federal land, unless otherwise directed. All of the above will take place prior to placement of drilling facilities.

Topsoil and vegetation will be stripped together to a depth of 6 to 8 inches and stockpiled by wind-row on the northeast edge of the location. No topsoil stripping will be allowed when soils are moisture saturated to a depth of 3 inches, or frozen below the stripping depth.

The reserve pit will be fenced on three sides prior to drilling activity and closed off on the fourth side after drilling is finished. Fencing will be four strands of barbed wire or 48-inch woven wire with one strand of barbed wire above the woven wire. All corners will be braced with a wooden H-type brace. The fence construction will be on cut or undisturbed ground and the fence will be maintained in a livestock tight condition.

10. Plans for Restoration of Surface:

The Price Field Office Manager will be notified at least 24-hours prior to commencing reclamation work.

Immediately upon completion of drilling, the location and surrounding area will be cleared of all debris, materials, trash, and junk not required for production.

Before any dirt work to restore the location takes place, the reserve pit must be completely dry and all cans, barrels, pipe, etc. will be removed.

*If well is completed as a producer:*

Unneeded areas of the location will be reclaimed as soon as the reserve pit has dried. The access road will be upgraded and maintained as necessary to prevent soil erosion and accommodate year-round traffic. Reshape areas unnecessary to operations, rip or disk on the contour, and seed all disturbed area outside the work area according to the seed mixture specified in the EIS for the Ferron Natural Gas Project. Save the topsoil for use during final reclamation unless the site can be recontoured to blend with the natural topography as required for final abandonment. Perennial vegetation must be established. Additional work will be required in case of seeding failures. All permanent facilities placed on the locations will be painted to blend with the natural environment.

10. Plans for Restoration of Surface (Continued):

*If well is abandoned/dry hole:*

Restore the access road and location to blend with the natural topography. During reclamation of the site, push the fill material into cuts and up over the backslope. Leave no depressions that will trap water or form ponds. Distribute topsoil evenly over the locations and re-seed according to the EIS for the Ferron Natural Gas Project.. The access roads and locations will be ripped or disked prior to seeding.

Prepare seed-bed by contour cultivating four to six inches deep. Drill seed 1/2 to 1 inch deep following the contour. In areas that cannot be drilled, broadcast seed at 1.5 times the application rate and cover 1/2 to 1 inch deep with a harrow or drag-bar.

Fall seeding will be completed after September 1 and prior to ground frost. Spring seeding will be completed after the frost has left the ground and prior to June 1.

11. Surface and Minerals Ownership:

The surface and the minerals are owned by the United States of America, Department of the Interior, Bureau of Land Management.

12. Other Information:

There will be no deviation from the proposed drilling and/or workover program without prior approval from the AO. Safe drilling and operating practices must be observed. All wells whether drilling, producing, suspended, or abandoned, will be identified in accordance with 43 CFT 3162.2 and in accordance with the EIS for the Ferron Natural Gas Project.

"Sundry Notice and Report on Wells" (Form 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 43 CFR 3162.2.

The dirt contractor will be provided with an approved copy of the APD & Surface Use Plan.

An archaeology survey for the proposed well has been performed by Montgomery & Associates and this survey has been submitted to the Utah State Historical Preservation Office (SHPO), Price District BLM, Moab District BLM and the Price Field Office.

The operator is responsible for informing all persons in the area who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts or fossils. The Operator will immediately bring to the attention of the Price Field Office Manager any and all antiquities or other objects of historic or scientific interest including, but not limited to, historic or prehistoric ruins, artifacts, or fossils discovered as a result of operations under this permit. The operator will immediately suspend all activities in the area of the object and will leave such discoveries intact until told to proceed by the Price Field Office Manager. Notice to proceed will be based upon evaluation of the cultural significance of the object. Evaluation will be by a qualified professional selected by the Price Field Office Manager from a Federal Agency insofar as practical. When not practical, the Operator will follow the mitigation requirements set forth by the Price Field Office Manager concerning protection, preservation, or disposition of any sites or material discovered. Within five working days the Price Field Office Manager will inform the Operator as to:

12. Other Information (Continued):

Whether materials appear eligible for the National Register of Historic Places;

the mitigation measure(s) the Operator will likely have to undertake before the site

can be used (assuming in situ preservation is not necessary); and,

a time frame for the Price Field Office Manager to complete an expedited review under 36 CFR 800.11 to conform, through the State Historic Preservation Officer, that the findings of the Price Field Office Manager are correct and that mitigation is appropriate.

If the Operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the Price Field Office Manager will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, in those situations where the Price Field Office Manager determines that mitigation, data recovery and/or salvage excavations are necessary, the Operator will bear the cost. The Price Field Office Manager will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the Price Field Office Manager that the required mitigation has been completed, the Operator will then be allowed to resume construction.

13. Lessee's or Operator's Representatives and Certification:

REPRESENTATIVE

Name: Bruce Darlington  
Phone: 281-874-1673  
Address: Anadarko Petroleum Corporation  
17001 Northchase Drive  
Houston, Texas 77060

CERTIFICATION

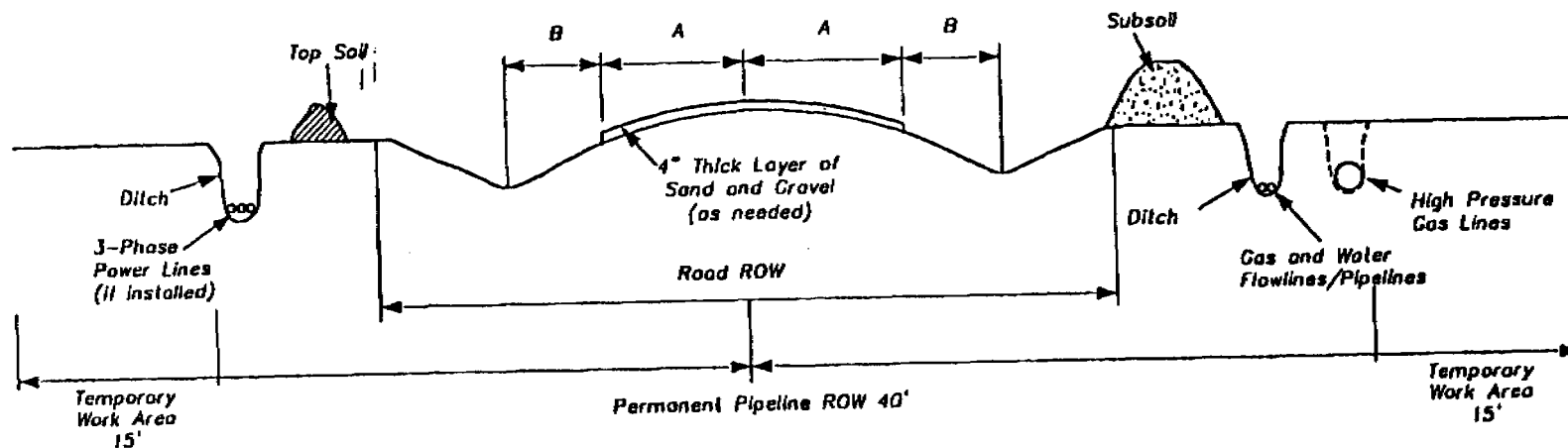
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsites and access routes, that I am familiar with the conditions which currently exist, that the statements made in this plan are to the best of my knowledge, true and correct, and that the work associated with the operations proposed herein will be performed by

ANADARKO PETROLEUM CORPORATION

and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

08-10-99  
Date

  
Bruce Darlington  
Sr. Drilling Engineer



	Surfaced Travel Way Width (ft.)	A (ft.)	B (ft.)	Approximate Disturbance Width (ft.)	Total ROW Width (ft.)
Resource Road	16	8	4	70	40
Local Road	20	10	4	70	40
Collector Road	24	12	4	70	40

Not To Scale

Figure 2-1  
Typical Roadbed  
and Pipeline/Utility Trench Cross Section



August 10, 1999

Bureau of Land Management  
82 East Dogwood  
Moab, Utah 84532

RE:

<i>Well Name</i>	<i>Location At Surface</i>	<i>Sec</i>	<i>Twn</i>	<i>Rng</i>	<i>Lease</i>
Helper Federal A-6	1275 FSL 933 FEL	23	13S	10E	UTU-58434
Helper Federal D-7	1320 FSL 1320 FEL	26	13S	10E	UTU-68315
Helper Federal D-8	546 FNL 1048 FEL	35	13S	10E	UTU-68315

To Whom it May Concern:

Please be advised that Anadarko Petroleum Corporation is considered to be the operator of the subject wells and is responsible under terms and conditions of the lease for the operations conducted on the leased lands. Bond coverage for these subject wells is provided by BLM Bond No. 153571 via surety consent as provided for in 43 CFR 3104.2.

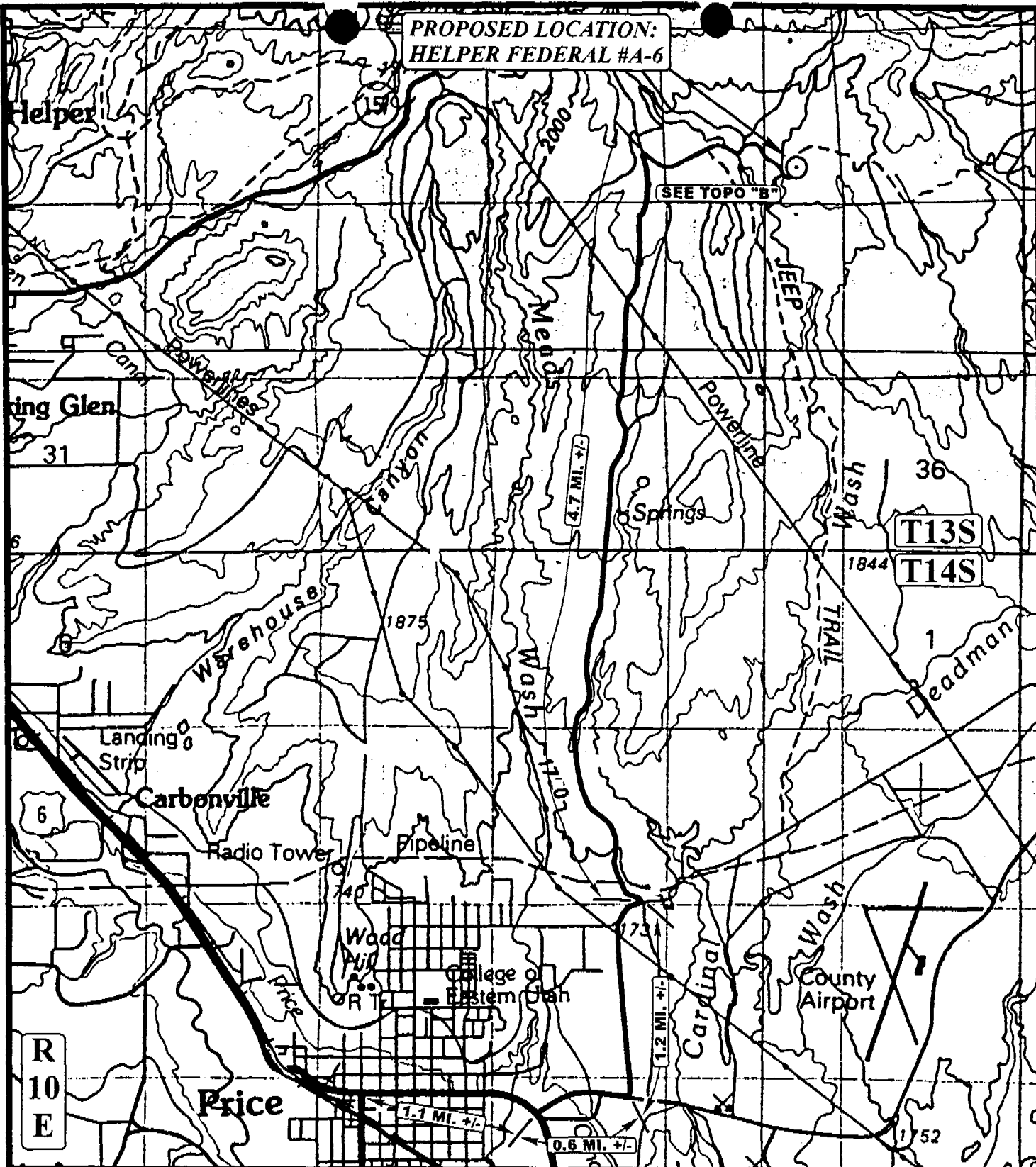
The aforementioned operator and bond will be held liable until the provisions of 43 CFR 3106.7-2 continuing responsibility are met.

Sincerely,

Bruce Darlington  
Sr. Drilling Engineer

BD/jd

**PROPOSED LOCATION:  
HELPER FEDERAL #A-6**



**LEGEND:**

○ PROPOSED LOCATION



**ANADARKO PETROLEUM CORP.**

**HELPER FEDERAL #A-6  
SECTION 23, T13S, R10E, S.L.B.&M.  
1275' FSL 933' FEL**



**Uintah Engineering & Land Surveying**  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1018

**TOPOGRAPHIC  
MAP**

**5 25 99**  
MONTH DAY YEAR

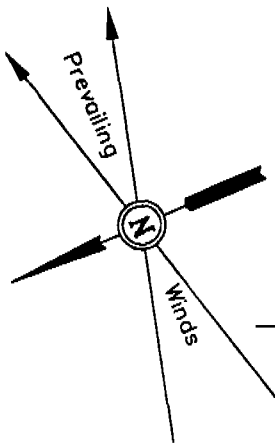
SCALE: 1" = 4000' DRAWN BY: D.COX REVISED: 00-00-00



# ANADARKO PETROLEUM CORP.

## LOCATION LAYOUT FOR

HELPER FEDERAL #A-6  
SECTION 23, T13S, R10E, S.L.B.&M.  
1275' FSL 933' FEL



SCALE: 1" = 50'  
DATE: 5-25-99  
Drawn By: D.COX

Approx.  
Top of  
Cut Slope

El. 78.1  
**C-15.0'**  
(btm. pit)

El. 77.2'  
**C-14.1'**  
(btm. pit)

NOTE:  
Pit Capacity with  
2' of Freeboard  
= 1,770 Bbls.

El. 77.6'  
**C-4.5'**

El. 77.6'  
**C-4.5'**

El. 73.4'  
**C-0.3'**

El. 76.9'  
**C-3.8'**

**C-2.5'**  
El. 75.6'

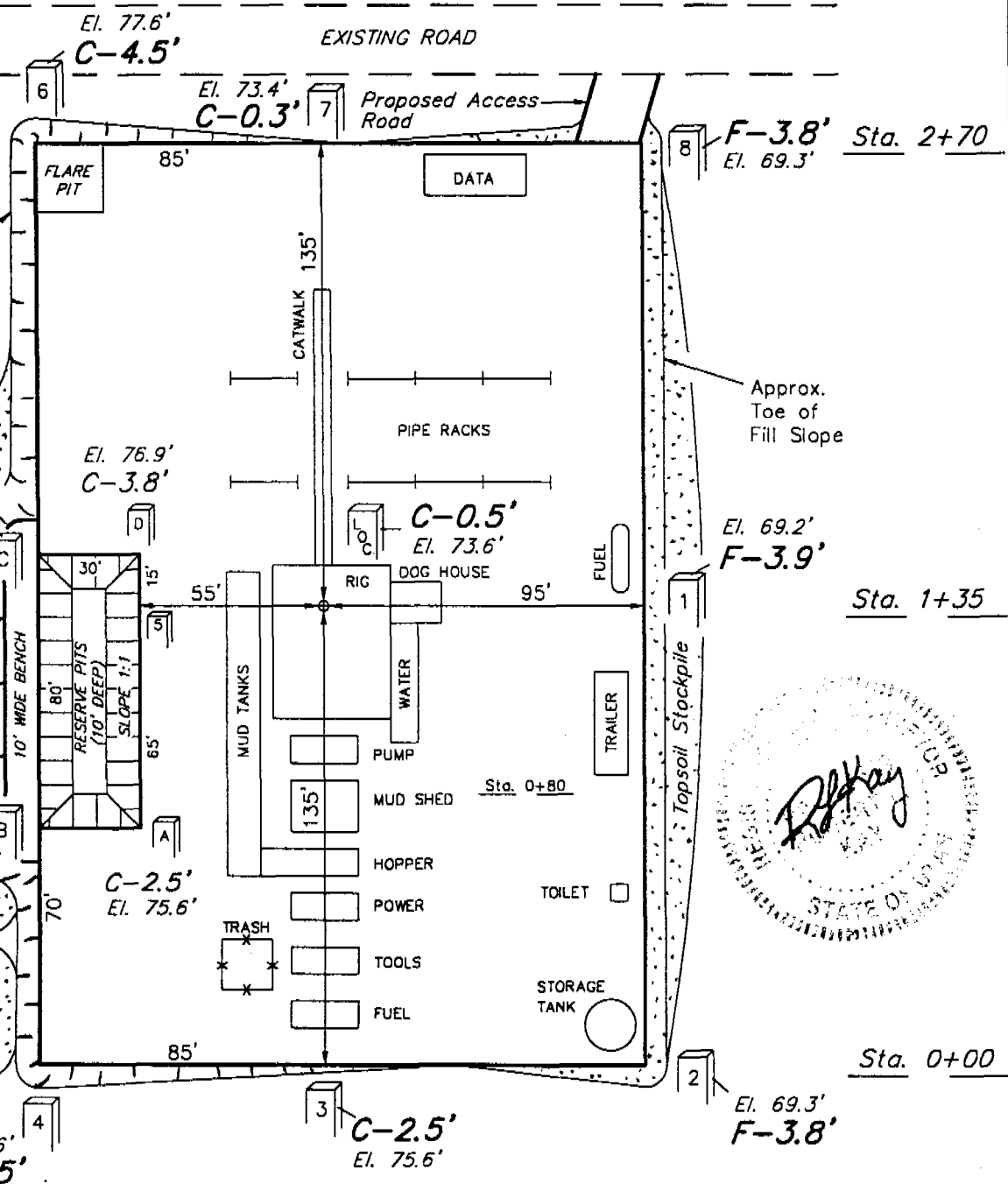
**C-2.5'**  
El. 75.6'

**F-3.8'** Sta. 2+70  
El. 69.3'

El. 69.2'  
**F-3.9'**

Sta. 1+35

Sta. 0+00



ELEV. UNGRADED GROUND AT LOC. STAKE = **6473.6'**  
ELEV. GRADED GROUND AT LOC. STAKE = **6473.1'**

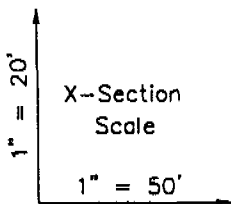
UINTAH ENGINEERING & LAND SURVEYING  
85 So. 200 East • Vernal, Utah 84078 • (435) 789-1017



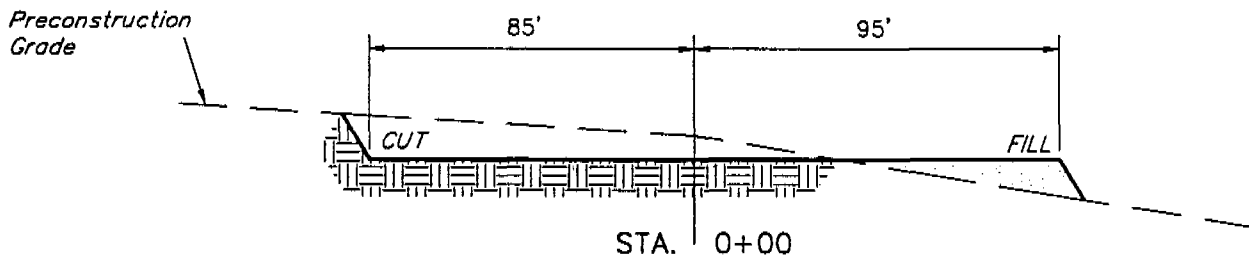
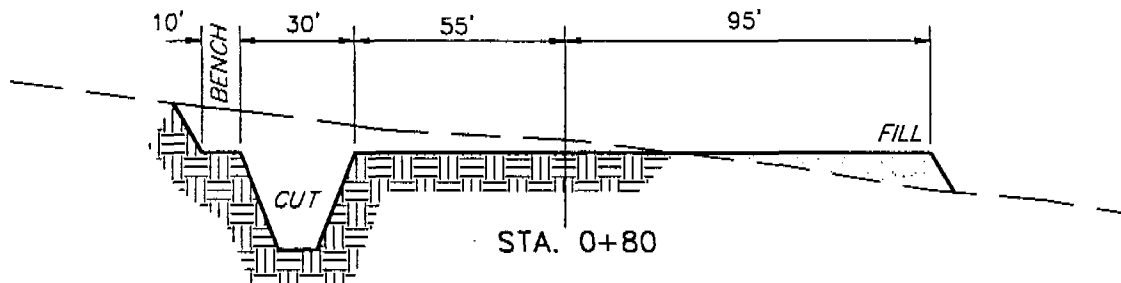
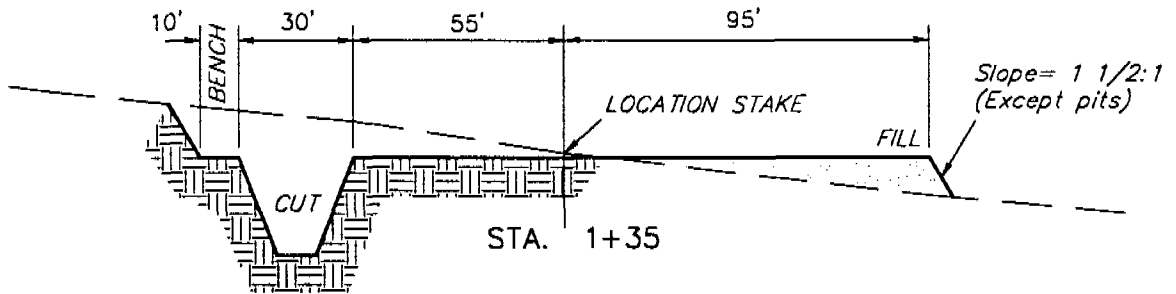
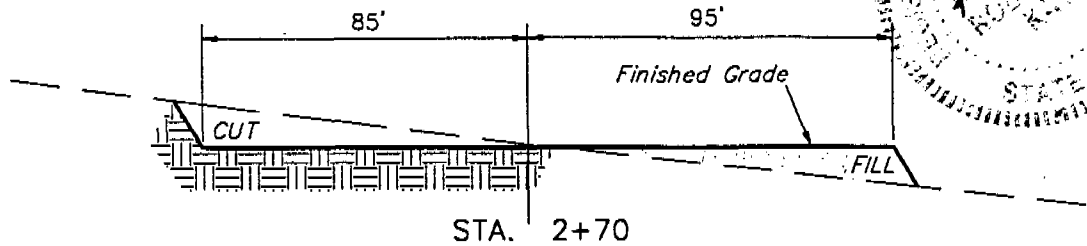
# ANADARKO PETROLEUM CORP.

## TYPICAL CROSS SECTIONS FOR

HELPER FEDERAL #A-6  
SECTION 23, T13S, R10E, S.L.B.&M.  
1275' FSL 933' FEL



DATE: 5-25-99  
Drawn By: D.COX



### APPROXIMATE YARDAGES

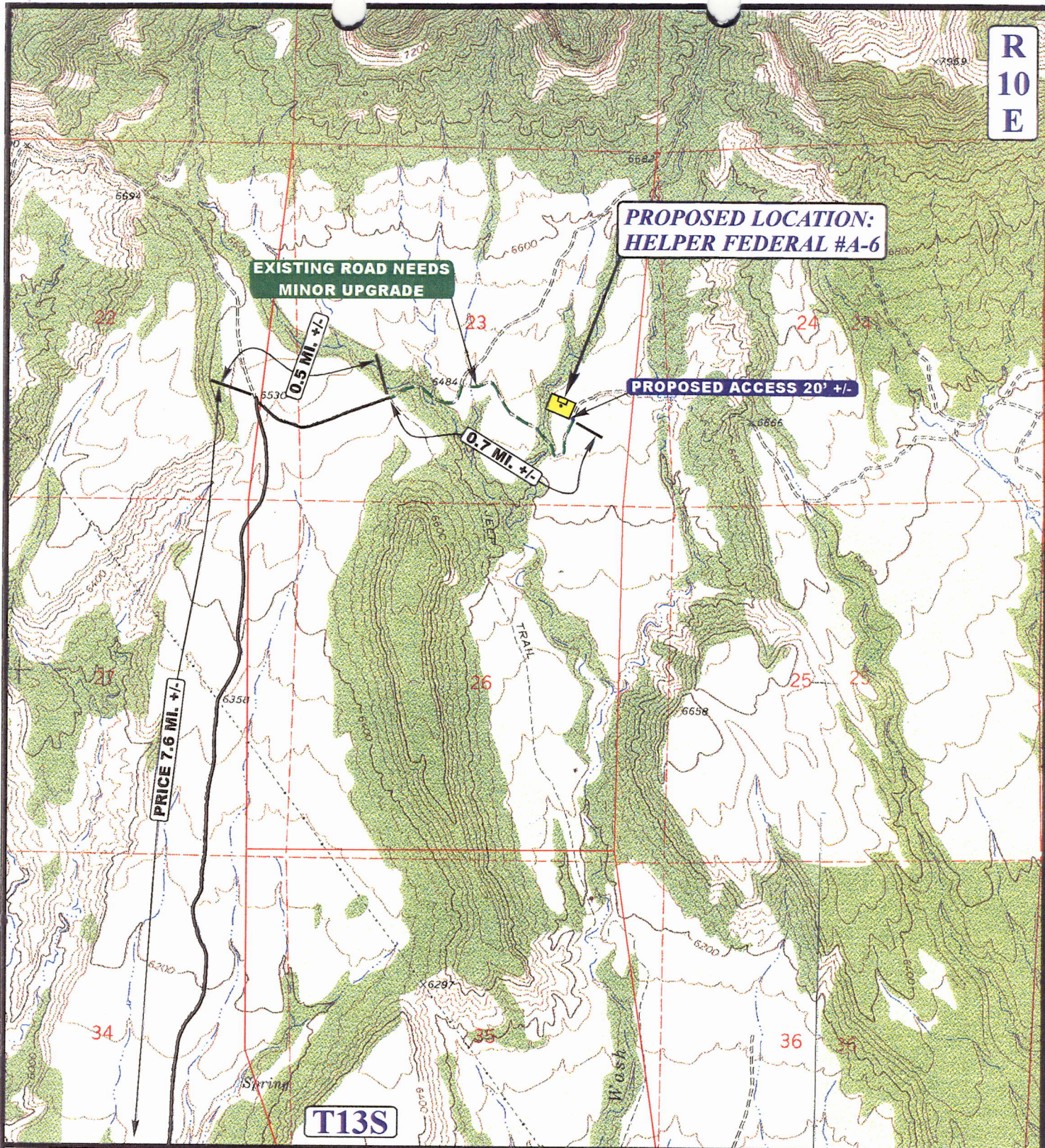
CUT	
(6") Topsoil Stripping	= 900 Cu. Yds.
Remaining Location	= 2,830 Cu. Yds.
<b>TOTAL CUT</b>	<b>= 3,730 CU.YDS.</b>
<b>FILL</b>	<b>= 2,000 CU.YDS.</b>

EXCESS MATERIAL AFTER 5% COMPACTION	= 1,620 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	= 1,170 Cu. Yds.
EXCESS UNBALANCE (After Rehabilitation)	= 450 Cu. Yds.

UINTAH ENGINEERING & LAND SURVEYING  
85 So. 200 East • Vernal, Utah 84078 • (435) 789-1017



**R  
10  
E**



**LEGEND:**

----- PROPOSED ACCESS ROAD  
 ————— EXISTING ROAD



**ANADARKO PETROLEUM CORP.**

**HELPER FEDERAL #A-6  
 SECTION 23, T13S, R10E, S.L.B.&M.  
 1275' FSL 933' FEL**



**Uintah Engineering & Land Surveying**  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813

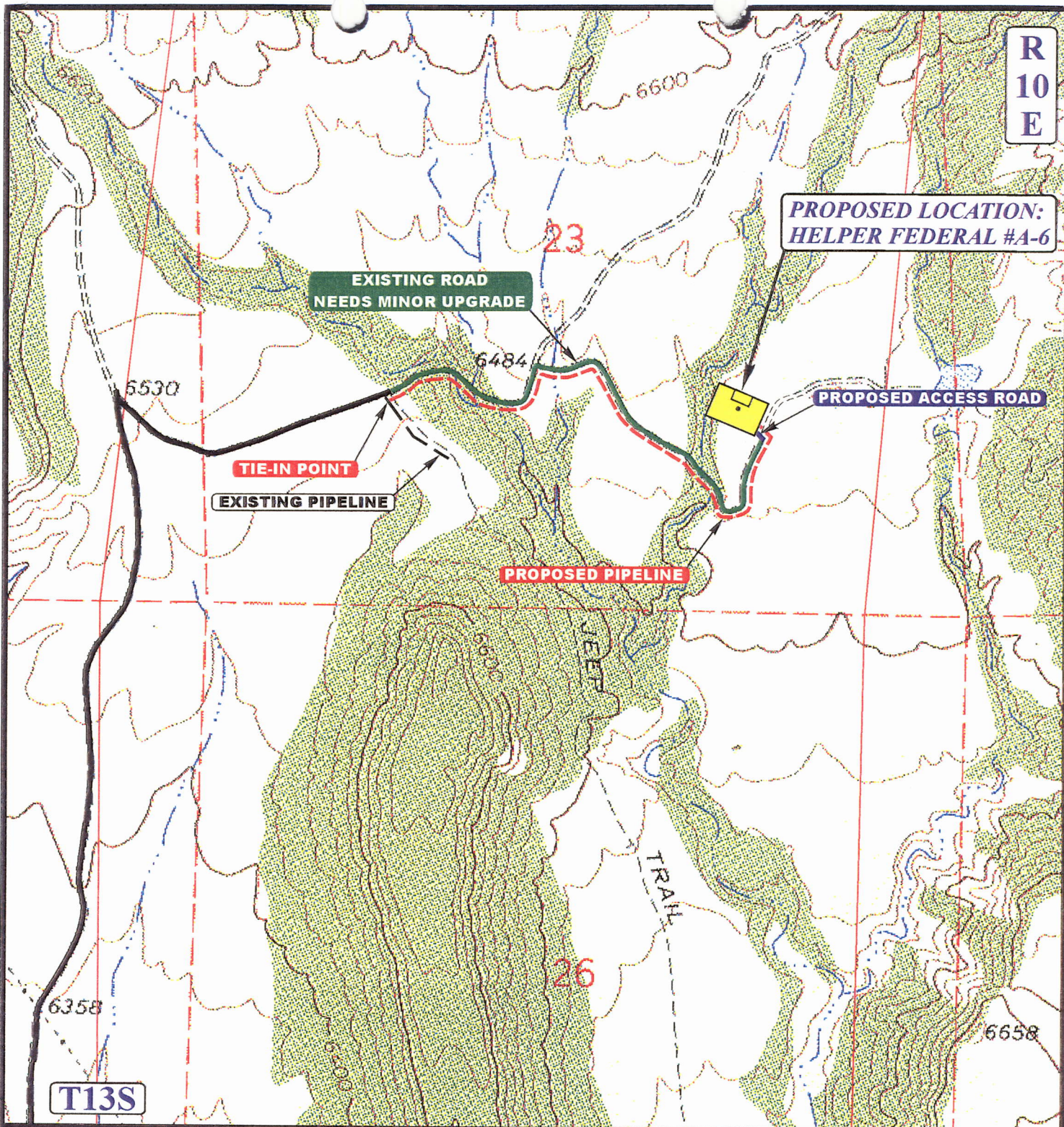
**TOPOGRAPHIC  
 MAP**

**5 25 99**  
 MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: D.COX REVISED: 00-00-00

**B  
 TOPO**





**APPROXIMATE TOTAL PIPELINE DISTANCE = 3,750' +/-**

**LEGEND:**

- EXISTING PIPELINE
- - - PROPOSED PIPELINE
- PROPOSED ACCESS

**ANADARKO PETROLEUM CORP.**

**HELPER FEDERAL #A-6**  
**SECTION 23, T13S, R10E, S.L.B.&M.**  
**1275' FSL 933' FEL**



**Uintah Engineering & Land Surveying**  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813



**TOPOGRAPHIC**  
**MAP**

**5 25 99**  
 MONTH DAY YEAR

SCALE: 1" = 1000' DRAWN BY: D.COX REVISED: 00-00-00

**C**  
**TOPO**



WORKSHEET  
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 08/11/1999

API NO. ASSIGNED: 43-007-30593

WELL NAME: HELPER FED A-6  
OPERATOR: ANADARKO PETROLEUM CORP (N0035)  
CONTACT: Gudy Davidson (281) 874-8766

PROPOSED LOCATION:  
SESE 23 - T13S - R10E  
SURFACE: 1275-FSL-0933-FEL  
BOTTOM: 1275-FSL-0933-FEL  
CARBON COUNTY  
HELPER FIELD (018)

LEASE TYPE: FED  
LEASE NUMBER: UTU-58434  
SURFACE OWNER: Federal

INSPECT LOCATN BY: / /

TECH REVIEW	Initials	Date
Engineering		
Geology		
Surface		

PROPOSED FORMATION: FRSD

RECEIVED AND/OR REVIEWED:

☒ Plat  
☒ Bond: Fed ☒ Ind ☐ Sta ☐ Fee  
(No. 153571)  
☒ Potash (Y/N)  
☒ Oil Shale (Y/N) \*190-5(B)  
☒ Water Permit  
(No. PRWID)  
☒ RDCC Review (Y/N)  
(Date: \_\_\_\_\_)  
N/A Fee Surf Agreement (Y/N)

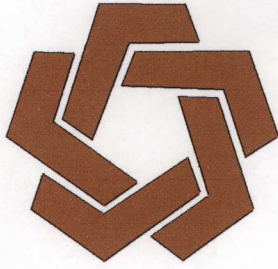
LOCATION AND SITING:

\_\_\_\_ R649-2-3. Unit \_\_\_\_\_  
\_\_\_\_ R649-3-2. General  
Siting: \_\_\_\_\_  
\_\_\_\_ R649-3-3. Exception  
☒ Drilling Unit  
Board Cause No: 241-1 (160')  
Eff Date: 1-2-98  
Siting: 4/60 ft. Dr. Unit boundary, 920' ft. another well.  
\_\_\_\_ R649-3-11. Directional Drill

COMMENTS:

STIPULATIONS: ① FEDERAL APPROVAL





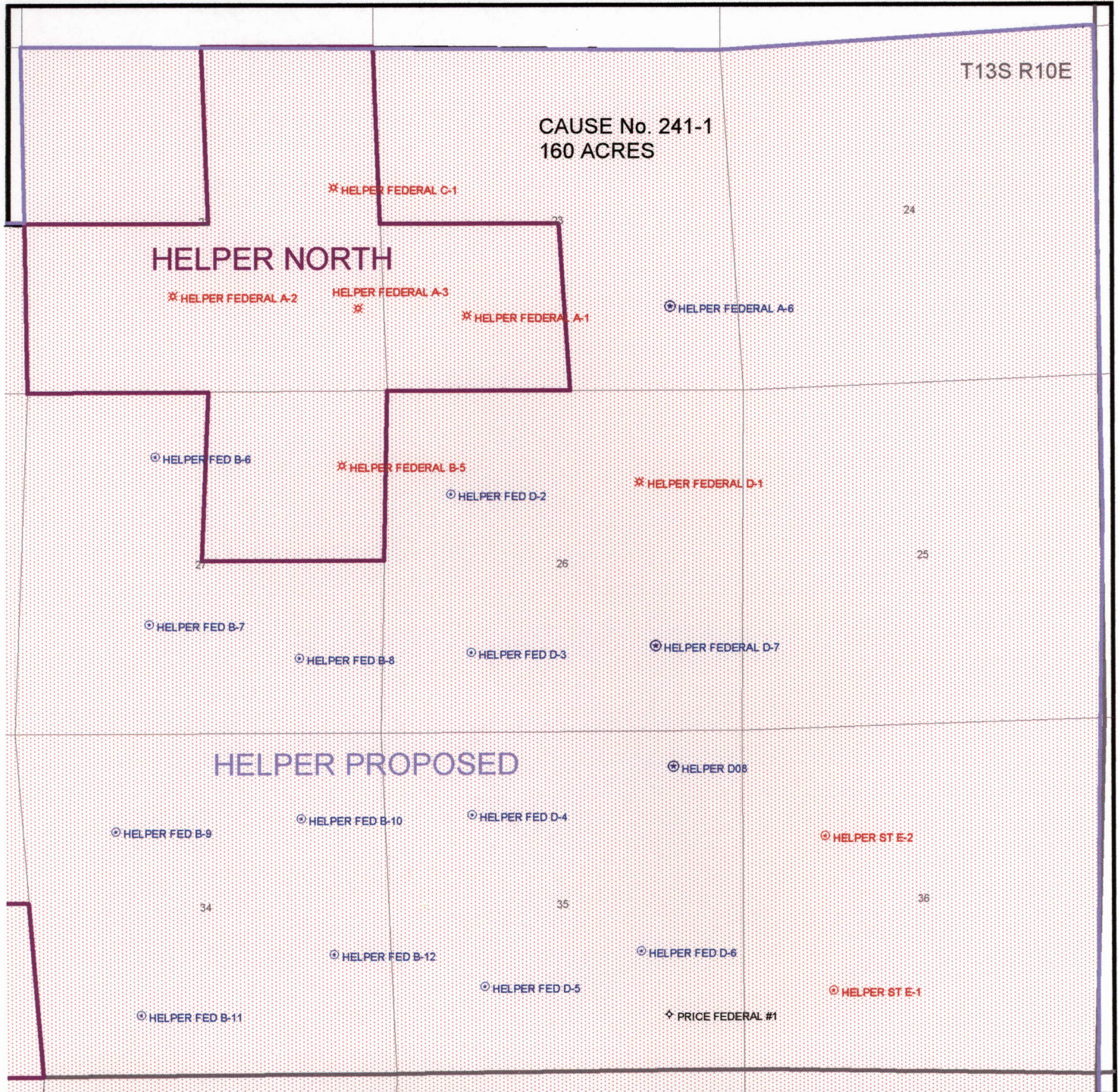
Division of Oil, Gas & Mining

OPERATOR: ANADARKO PETROLEUM CORP. (N0035)

FIELD: HELPER PROPOSED (018)

SEC. 23, 26, & 35 TWP 13 S RNG 10 E

COUNTY: CARBON ORDER No. 241-1



PREPARED  
DATE: 17-AUG-1999





State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt  
Governor

Kathleen Clarke  
Executive Director

Lowell P. Braxton  
Division Director

1594 West North Temple, Suite 1210  
PO Box 145801  
Salt Lake City, Utah 84114-5801  
801-538-5340  
801-359-3940 (Fax)  
801-538-7223 (TDD)

August 19, 1999

Anadarko Petroleum Corporation  
17001 Northchase Drive  
Houston, Texas 77060

Re: Helper Federal A-6 Well, 1275' FSL, 933' FEL, SE SE, Sec. 23, T. 13 S., R. 10 E.,  
Carbon County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. 40-6-1 et seq., Utah Administrative Code R649-3-1 et seq., and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-007-30593.

Sincerely,

John R. Baza  
Associate Director

lwp

Enclosures

cc: Carbon County Assessor  
Bureau of Land Management, Moab District Office

**Operator:** Anadarko Petroleum Corporation

**Well Name & Number:** Helper Federal A-6

**API Number:** 43-007-30593

**Lease:** Federal **Surface Owner:** Federal

**Location:** SE SE **Sec.** 23 **T.** 13 S. **R.** 10 E.

### **Conditions of Approval**

**1. General**

Compliance with the requirements of Utah Admin. R649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for Permit to Drill.

**2. Notification Requirements**

Notify the Division within 24 hours of spudding the well. Contact Carol Daniels at (801)538-5284.

Notify the Division prior to commencing operations to plug and abandon the well. Contact Dan Jarvis at (801) 538-5338 or Robert Krueger at (801) 538-5274.

**3. Reporting Requirements**

All required reports, forms and submittals shall be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

**4. State approval of this well does not supersede the required federal approval which must be obtained prior to drilling.**

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

PRINT IN TRIPLICATE  
See Instructions on  
reverse side)

Form approved.  
Budget Bureau No. 1004-0138  
Expires: December 31, 1991

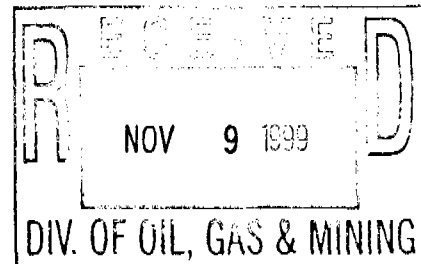
99-141

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1 a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. UTU-58434	
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER - COALBED METHANE <input checked="" type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		6. IF INDIAN, ALLOTTEES OR TRIBE NAME	
2. NAME OF OPERATOR ANADARKO PETROLEUM CORPORATION		7. UNIT AGREEMENT NAME	
3. ADDRESS AND TELEPHONE NO. 17001 Northchase Drive, Houston, Texas 77060 281/875-1101		8. FARM OR LEASE NAME WELL NO. Helper Federal A-6	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.) At surface 1275 FSL 933 FEL, SE Section 23, T13S R10E At proposed prod. zone 1275 FSL 933 FEL, SE Section 23, T13S R10E		9. API WELL NO. 43-007-30593	
CONFIDENTIAL		10. FIELD AND POOL OR WILDCAT Helper CBM	
		11. SEC. T.R.M. OR BLK. AND SURVEY OR AREA Section 23, T13S R10E	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE. 9 miles North of Price, Ut		12. COUNTY Carbon	13. STATE Utah
15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any) 933'	16. NO. OF ACRES IN LEASE 631'	17. NO. OF ACRES ASSIGNED TO THIS WELL. 160	
18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 3106'	19. PROPOSED DEPTH 4200'	20. ROTARY OR CABLE TOOLS Rotary	
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 6474' GL		22. APPROX. DATE WORK WILL START. October 1 1999	
23. PROPOSED CASING AND CEMENTING PROGRAM			
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH
12 1/4"	8 5/8" J-55	24#	300'
7-7/8"	5-1/2" N80	17#	4200
			QUANTITY OF CEMENT
			200 cu. ft.
			300 cu. ft.

Attached is the following:

1. Survey Plat
2. Drilling Plan with BOP Schematic, Figure 1-1
3. Surface Use Plan
4. Certification of Operator
5. Topo & Access Map & Area Map.
6. Pit & Pad Layout with cross sections of pit, pad, & rig layout.



The Cultural Resource Study was submitted under separate cover.

Nationwide BLM Oil & Gas Lease Bond Number 153571  
Utah Oil & Gas Lease Bond 224351 (expiration date 06-30-2000)  
Utah Bond of Lessee 203521

FLARING OR VENTING OF  
GAS IS SUBJECT TO NTL 4-A  
Dated 1/1/80

IN ABOVE SPACE, DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED Judy Davidson TITLE Judy Davidson DATE 08/10/1999  
Regulatory Analyst

(This space for Federal or State office use.)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. CONDITIONS OF APPROVAL IF ANY:

APPROVED BY /s/ WILLIAM C. STRINGER TITLE Assistant Field Manager, DATE NOV - 3 1999  
Division of Resources

See Instructions On Reverse Side CONDITIONS OF APPROVAL ATTACHED



**T13S, R10E, S.L.B.&M.**

N89°36'W - 40.06 (G.L.O.)

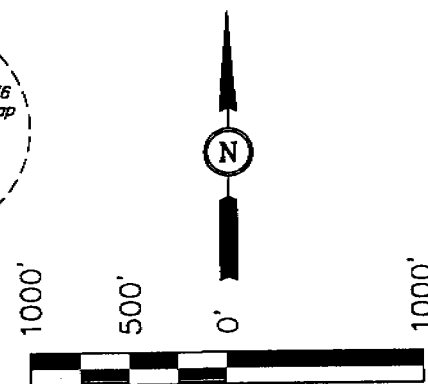
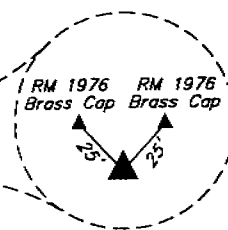
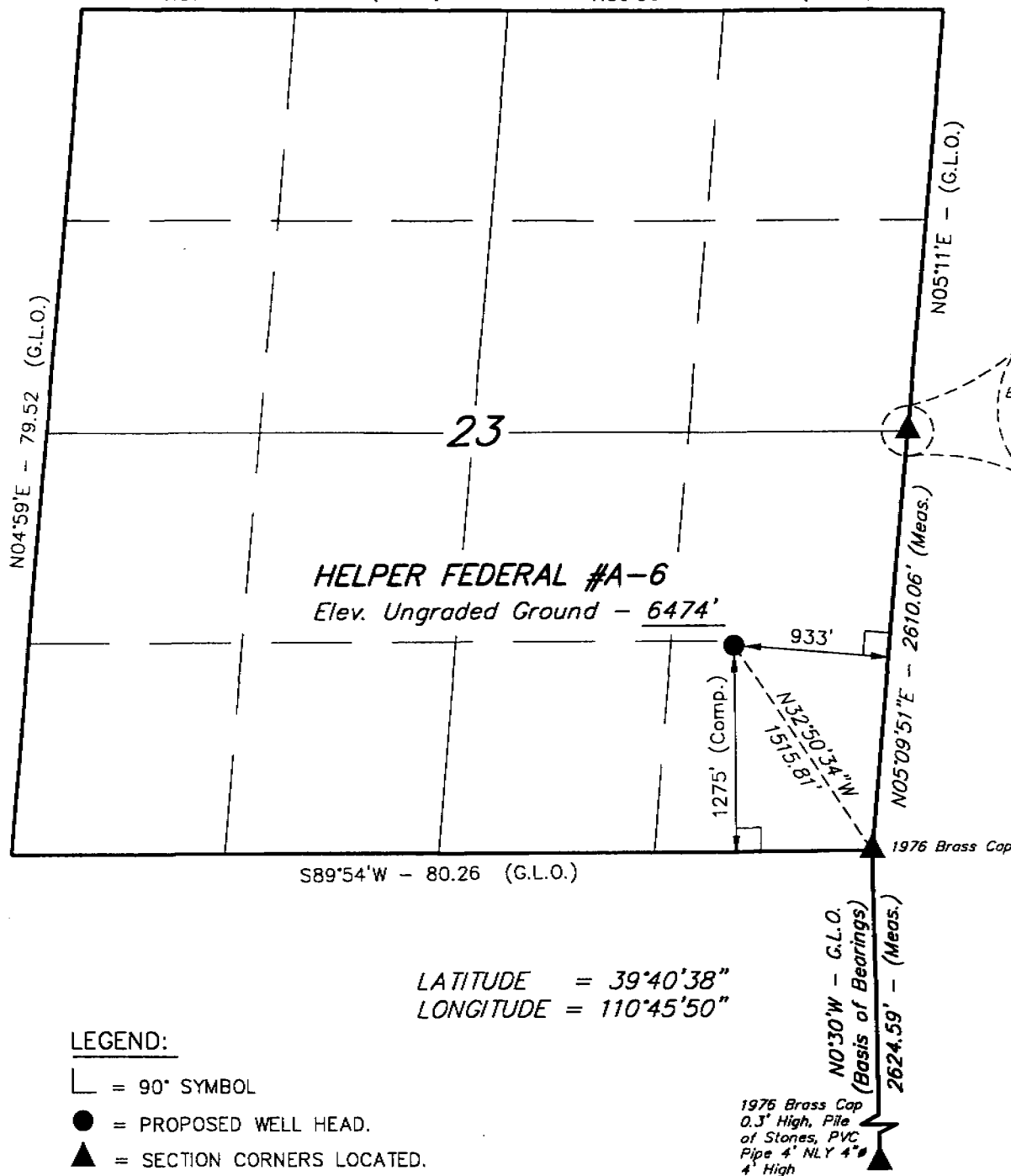
N89°50'W - 40.39 (G.L.O.)

**ANADARKO PETROLEUM CORP.**

Well Location, HELPER FEDERAL #A-6, located as shown in the SE 1/4 SE 1/4 of Section 23, T13S, R10E, S.L.B.&M. Carbon County, Utah.

BASIS OF ELEVATION

SPOT ELEVATION AT A ROAD INTERSECTION IN THE SW 1/4 OF SECTION 23, T13S, R10E, S.L.B.&M. TAKEN FROM THE HELPER QUADRANGLE, UTAH, CARBON COUNTY, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 6484 FEET.



SCALE

CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

*Robert L. Hays*  
REGISTERED LAND SURVEYOR  
REGISTRATION NO. 161319  
STATE OF UTAH

LEGEND:

- └─┘ = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.

**UINTAH ENGINEERING & LAND SURVEYING**  
85 SOUTH 200 EAST - VERNAL, UTAH 84078  
(435) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 5-23-99	DATE DRAWN: 5-25-99
PARTY J.F. J.J. D.COX	REFERENCES G.L.O. PLAT	
WEATHER WARM	FILE ANADARKO PETROLEUM CORP.	

Anadarko Petroleum Corporation  
Helper Federal A-6  
Lease U-58434  
SE/SE Section 23, T13S, R10E  
Carbon County, Utah

CONDITIONS OF APPROVAL

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Be advised that Anadarko Petroleum Corporation is considered to be the operator of the above well and is responsible under the terms and conditions of the lease for the operations conducted on the leased lands.

Bond coverage for this well is provided by ES 0128 (Principal - Anadarko Petroleum Corporation) via surety consent as provided for in 43 CFR § 3104.2.

This office will hold the aforementioned operator and bond liable until the provisions of 43 CFR § 3106.7-2 continuing responsibility are met.

This permit will be valid for a period of one year from the date of approval. After permit termination, a new application must be filed for approval.

All lease operations will be conducted in full compliance with applicable regulations (43 CFR § 3100), Onshore Oil and Gas Orders, lease terms, notices to lessees, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions and the approved plan will be made available to field representatives to insure compliance.

A. DRILLING PROGRAM

1. The proposed BOPE is in a 2M configuration, and is adequate for this depth in this area. Installation, testing and operation of the system shall be in conformance with Onshore Oil and Gas Order No. 2.
2. The requirements for air drilling, found in Onshore Oil and Gas Order No. 2, part III, E (Special Drilling Operations), shall be followed. This section requires, at a minimum, the use of the following equipment not mentioned in the application:
  - Spark arresters
  - Blooie line discharge 100 feet from wellbore
  - Straight blooie line
  - Deduster equipment
  - Float valve above bit
  - Automatic igniter on the blooie line
3. Concurrent approval from the State of Utah, Division of Oil, Gas & Mining is required before conducting any surface disturbing activities.

B. SURFACE USE

1. The following appendices are attached for your reference. They are to be followed as conditions of approval:

Table A-1, Seed Mixture for Green Strip Areas

Table A-2, Seed Mixture for Final Reclamation, Pinyon-Juniper Areas

EMP 16 & 17, Winter Seasonal Restriction on Critical & High Priority Winter Range

EMP 19, Critical Winter Range Browse Hand Planting

EMP 21, Surface Disturbance Mitigation for Critical & High Priority Winter Range

2. Whether the mud pit shall be lined will be determined at the time of construction.
3. Within six months of installation, surface structures shall be painted in the following flat, earth tone color: Olive Black (5WA20-6). This Fuller O'Brien color is for reference only. Any brand of paint may be used provided the colors match. Any facilities that must be painted to comply with OSHA standards are exempt.

GENERAL CONSTRUCTION

1. Operator shall contact the Price BLM Office at least forty-eight hours prior to the anticipated start of construction and/or any surface disturbing activities. The BLM may require and schedule a preconstruction conference with the operator prior to the operator commencing construction and/or surface disturbing activities. The operator and the operator's contractor, or agents involved with construction and/or any surface disturbing activities associated with the project, shall attend this conference to review the Conditions of Approval and plan of development. The operator's inspector will be designated at the pre-drill conference, and is to be given an approved copy of all maps, permits and conditions of approval before the start of construction. The BLM will also designate a representative for the project at the preconstruction conference.
2. The operator shall designate a representative(s) who shall have the authority to act upon and to implement instructions from the BLM. The operator's representative shall be available for communication with the BLM within a reasonable time when construction or other surface disturbing activities are underway.

3. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the operator, or any person working on his behalf, on public land is to be immediately reported to the Price BLM Office. The operator will suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Price BLM Office. An evaluation of the discovery will be made by the BLM to determine appropriate actions to prevent the loss of significant cultural or scientific values. The operator is responsible for the cost of evaluation of any site found during construction. The BLM will determine what mitigation is necessary.
4. During project construction, surface disturbance and vehicle travel shall be limited to the approved location and access routes. Any additional area needed must be approved by the Price BLM Office prior to use.
5. The operator must provide a trash cage for the collection and containment of all trash. The trash shall be disposed in an authorized landfill. The location and access roads shall be kept litter free.
6. Vegetation removal necessitated by construction shall be confined to the limits of actual construction. Removed vegetation will be stockpiled for use in reclamation or removed from the construction site at the direction of the BLM.
7. Prior to surface disturbance, topsoil is to be separately removed and segregated from other material. Topsoil depth will be decided onsite by BLM. If the topsoil is less than 6 inches, a 6-inch layer that includes the A horizon and the unconsolidated material immediately below the A horizon shall be removed and the mixture segregated and redistributed as the surface soil layer.

Generally topsoil shall be stored within the pad site or adjacent to access roads. The company in consultation with BLM shall determine stockpile locations and dimensions at the onsite. If the topsoil stockpiles will not be redistributed for a period in excess of one (1) year, the stockpiles are to be seeded with seed mixture Pinyon-Juniper (see attached).

#### ROAD and PIPELINE CONSTRUCTION

8. Operator shall provide an inspector under the direction of a registered professional engineer (PE) at all times during road construction. A PE shall certify (statement with PE stamp) that the road was constructed to the required Bureau of Land Management (BLM) road standards.
9. Road construction or routine maintenance activities are to be performed during periods when the soil can adequately support construction equipment. If such equipment creates ruts more than 6 inches deep, the soil is deemed too wet to

adequately support construction equipment.

10. The operator is responsible for maintenance of all roads authorized through the lease or a right-of-way. Construction and maintenance shall comply with Class II or III Road Standards as described in BLM Manual Section 9113 and the Moab District Road Standards, except as modified by BLM. Maintenance may include but is not limited to grading, applying gravel, snow removal, ditch cleaning, headcut restoration/prevention.
11. Topsoil from access roads and pipelines is to be wind rowed along the uphill side of the road or stored in an approved manner. When the road and pipeline is rehabilitated, this soil will then be used as a top coating for the seed bed.
12. Erosion-control structures such as water bars, diversion channels, and terraces will be constructed to divert water and reduce soil erosion on the disturbed area. Road ditch turnouts shall be equipped with energy dissipators as needed to avoid erosion. Where roads interrupt overland sheet-flow and convert this runoff to channel flow, ditch turnouts shall be designed to reconvert channel flow to sheet flow. Rock energy dissipators and gravel dispersion fans may be used, or any other design which would accomplish the desired reconversion of flow regime. As necessary cut banks, road drainages, and road crossings shall be armored or otherwise engineered to prevent headcutting.

#### PAD CONSTRUCTION

13. During the construction of the drill pad, suitable topsoil material is to be stripped and conserved in a stockpile on the pad. If stockpiles are to remain for more than a year, they shall be seeded with the seed mixture Sagebrush-Grass (see attached).
14. Generally, drill pads are to be designed to prevent overland flow of water from entering or leaving the site. The pad is to be sloped to drain spills and water into the reserve pit. The drill pad shall be designed to disperse diverted overland flow and to regulate flow velocity so as to prevent or minimize erosion. Well pad diversion outlets shall be equipped with rock energy brakes and gravel-bedded dispersion fans.

#### REHABILITATION PROCEDURES

##### Site Preparation

15. The entire roadbed should be obliterated and brought back to the approximate original contour. Drainage control is to be reestablished as necessary. All areas affected by

road construction are to be recontoured to blend in with the existing topography. All berms are to be removed unless determined to be beneficial by BLM. In recontouring the disturbed areas, care should be taken to not disturb additional vegetation.

#### Seedbed Preparation

16. An adequate seedbed should be prepared for all sites to be seeded. Areas to be revegetated should be chiselled or disked to a depth of at least 12 inches unless restrained by bedrock.
17. Ripping of fill materials should be completed by a bulldozer equipped with single or a twin set of ripper shanks. Ripping should be done on 4-foot centers to a depth of 12 inches. The process should be repeated until the compacted area is loose and friable, then shall be followed by final grading. Seedbed preparation will be considered complete when the soil surface is completely roughened and the number of rocks (if present) on the site is sufficient to cause the site to match the surrounding terrain.
18. After final grading, the stockpiled topsoil shall be spread evenly across the disturbed area.

#### Fertilization

19. Commercial fertilizer with a formula of 16-16-8 is to be applied at a rate of 200 pounds per acre to the site. The rate may be adjusted depending on soil.
20. Fertilizer is to be applied not more than 48 hours before seeding, and shall be cultivated into the upper 3 inches of soil.
21. Fertilizer is to be broadcast over the soil using hand-operated "cyclone-type" seeders or rotary broadcast equipment attached to construction or revegetation machinery as appropriate to slope. All equipment should be equipped with a metering device. Fertilizer application is to take place before the final seeding preparation treatment. Fertilizer broadcasting operations should not be conducted when wind velocities would interfere with even distribution of the material.

#### Mulching

22. When it is time to reclaim this location, the Price BLM Office will determine whether it will be necessary to use mulch in the reclamation process. The type of mulch should meet the following requirements: Wood cellulose fiber shall be natural or cooked, shall disperse readily in water, and shall be nontoxic. Mulch shall be thermally produced and air dried. The homogeneous slurry or mixture shall be capable of

application with power spray equipment. A colored dye that is noninjurious to plant growth may be used when specified. Wood cellulose fiber is to be packaged in new, labeled containers. A minimum application of 1500 pounds per acre shall be applied. A suitable tackifier shall be applied with the mulch at a rate of 60 to 80 pounds per acre.

An alternative method of mulching on small sites would be the application of straw or hay mulch at a rate of 2000 pounds per acre. Hay or straw shall be certified weed free. Following the application of straw or hay, crimping shall occur to ensure retention.

### Reseeding

23. All disturbed areas are to be seeded with the seed mixture required by the BLM. The seed mixture(s) shall be planted in the fall of the year (Sept-Nov), in the amounts specified in pounds of pure live seed (PLS)/acre. There shall be no noxious weed seed in the seed mixture. Seed will be tested and the viability testing of seed shall be done in accordance with State law(s) and within 12 months prior to planting. Commercial seed will be either certified or registered seed. The seed mixture container shall be tagged in accordance with State law(s) and available for inspection by the BLM. Seed is to be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture shall be evenly and uniformly planted over the disturbed area. (Smaller/heavier seeds tend to drop to the bottom of the drill and are planted first. Appropriate measures should be taken to ensure this does not occur.) Where drilling is not possible, seed is to be broadcast and the area raked or chained to cover the seed. Woody species with seeds that are too large for the drill will be broadcast. When broadcasting the seed, the pounds per acre noted below are to be increased by 50 percent. Reseeding may be required if a satisfactory stand is not established to the surface rights owner's specifications. Evaluation of the seeding's success will not be made before completion of the second growing season after the vegetation becomes established. The Price BLM Office is to be notified a minimum of seven days before seeding a project.
24. The disturbed areas for the road and pipeline must be seeded in the fall of the year, immediately after the topsoil is replaced. The prescribed seed mixture is Pinyon-Juniper (see attached table).

### General

25. Prior to the use of insecticides, herbicides, fungicides, rodenticides and other similar substances, the operator must obtain from BLM, approval of a written plan. The plan must describe the type and quantity of material to be used, the pest to be controlled,



the method of application, the location for storage and disposal of containers, and other information that BLM may require. A pesticide may be used only in accordance with its registered uses and within other agency limitations. Pesticides must not be permanently stored on public lands.

The following seed mixture would be planted along service road borrow ditches, around the edges of drill pads with a production well, and surrounding other production and maintenance facilities. The purpose for this is to provide a "green strip" buffer to minimize fire hazards and prevent invasion and establishment of noxious weeds in areas that will receive continued disturbance for the life of these areas.

Table A-1

Common Plant Name	Scientific Name	Pounds per acre (PLS)
Forage kochia	<i>Kochia prostrata</i>	2
Wyoming big sagebrush	<i>Artemisia tridentata wyomingensis</i> var. Gordon Creek	1
Douglas low rabbitbrush	<i>Chrysothamnus viscidiflorus</i>	1
TOTAL		4

The following seed mixture is for the area that would receive final reclamation. Areas would be planted to protect them from soil erosion and to restore forage production.

Table A-2

Common Plant Name	Scientific Name	Pounds per acre (PLS)
<b>Pinyon Juniper Areas</b>		
<i>Grasses</i>		
Thickspike wheatgrass	<i>Elymus lanceolatus</i>	1.5
Intermediate wheatgrass	<i>Elytrigia intermedia</i>	1.5
Squirreltail	<i>Elymus elymoides</i>	2
Crested wheatgrass	<i>Agropyron desertorum</i>	2
<i>Forbs</i>		
Lewis flax	<i>Linum perenne lewisii</i>	1
Palmer penstemon	<i>Penstemon palmerii</i>	1
<i>Shrubs</i>		
Forage kochia	<i>Kochia prostrata</i>	2
Fourwing saltbrush	<i>Atriplex canescense</i>	2
Wyoming big sagebrush	<i>Artemesia tridentata wyomingensis</i>	1
	var. Gordon Creek	
Antelope bitterbrush	<i>Purshia tridentata</i>	1
TOTAL		15

FERRON NATURAL GAS PROJECT AREA  
PROPOSER: ANADARKO

WELL #: A-6

**EPM 16 & 17: WINTER SEASONAL RESTRICTION (DECEMBER 1 to APRIL 15) ON CRUCIAL AND HIGH PRIORITY WINTER RANGE.**

Pg 1 of 1

Restrictions on Construction Phase Activity: Prohibit construction phase activity, described below, on big game high value and critical winter range during the period (December 1 - April 15) without regard for land ownership.

This condition would not apply to normal maintenance and operation of producing wells, described below. On nonfederal lands (where the federal government does not have either surface or subsurface ownership) the Companies would be allowed to conduct construction phase activity if needed to avoid breach of contract or loss of lease rights. In the event construction phase activity proceeds into the winter closure period on non federal interest lands, Companies would make available appropriate documentation to UDWR, upon request.

Construction Phase Activity: Construction phase activity is considered to include all work associated with initial drilling and construction of facilities through completion, including installation of pumping equipment, connection with ancillary facilities and tie-in with pipelines necessary for product delivery.

Companies would not be allowed to initiate construction activity unless it is reasonable to believe that such work can be finished to a logical stopping point prior to December 1 of that year. Specific activities considered to be covered by the seasonal closure include all heavy equipment operation including but not limited to the following:

- Mobilization/Demobilization or operation of heavy equipment (crawler tractor, front end loader, backhoe, road grader, etc.)
- Construction activity (road construction or upgrading, pad, pipeline, powerline, ancillary facilities, etc.),
- Drilling activity (Operator would not propose or initiate drilling activity if the project could not reasonably be expected to be finished to a logical stopping point by the December 1 date of that year.)
- Seismic operation, detonation of explosives

This seasonal closure would not apply to reconnaissance, survey/design and/or flagging of project work or other similar activity not requiring actions listed for heavy equipment operation.

Production Phase: A well is considered to be in production phase when the well and ancillary facilities are completed to the point that they are capable of producing and delivering product for sale. It is noted that heavy equipment operation may be necessary in the performance of maintenance and operation of producing wells.

Restriction on Non Emergency Workover Operations: The Companies will schedule non-emergency workover operations (defined below) on big game crucial and high value winter range outside the December 1 to April 15 date of the seasonal closure.

Non-emergency Workover Operations: Workover operations to correct or reverse a gradual loss of production over time (loss of production of 20 percent or less over a 60 day period) is considered to be routine or non-emergency workover operations and would not be permitted during the December 1 to April 15 time frame.

Emergency Workover Operations: Emergency work over operations are defined as downhole equipment failure problems or workover operation necessary to avoid shut in of the well or to avoid an immediate safety or environmental problem. Loss of production greater than 20 percent within a 60 day period is indicative of pump failure and will be treated as an emergency workover operation. The Companies will submit Sundry notices to BLM within five days of the emergency workover operations between December 1 and April 15.

FERRON NATURAL GAS PROJECT AREA  
PROPOSER: ANADARKO

WELL #: A-6

**EPM 19: CRITICAL WINTER RANGE BROWSE HAND PLANTING**

**Pg 1 of 1**

One or two browse species lists (checked below) are to be hand planted at the prescribed application rate and according to the following prescribed methods on critical winter range areas that are undergoing long term reclamation. This would include all pipeline corridors, berm around edge of drill pads, miscellaneous disturbed areas associated with construction such as staging areas for equipment, sidecast on road cuts, along side upgraded or new roads up to and including borrow ditch and in the termination of redundant access roads being closed. This planting shall be completed in the first planting window following reclamation.

**Planting Methods:**

Planting shall be accomplished using a labor force with specific experience in landscape restoration, hand planting methods and handling and care of browse tubling and or bareroot stock plants.

Browse plants to be utilized can be bareroot stock or tubling stock plants of 1 year old age class or greater.

Browse seedling protectors will be used to provide protection from browsing ungulates for two years. Seedling protectors will be of an open mesh rigid design that will break down when exposed to sunlight and that measures a minimum of 12 inches in length and 4 inches in diameter.

Planting shall be completed in the spring (March 1- April 1) and or fall (November 1- December 1) planting windows.

Browse plants shall be stored and handled in such a manner as to maintain viability, according to the type of browse stock being used.

**Planting Species and Application Rate:**

<u>Species</u>	<input checked="" type="checkbox"/> Sagebrush-Grass <u>Plants Per Acre</u>	<input type="checkbox"/> Pinyon-Juniper
Wyoming Sagebrush (Gordon Creek)	100	50
Fourwing Saltbush (Utah seed source collected at or above 5,000 feet elevation)	100	50
True Mountain Mahogany (Utah seed source)	0	50
Antelope Bitterbrush (Utah seed source)	0	50
Total	200	200

**Suitable Substitutions:**

Prostrate Kochia	yes	yes
Whitestem Rubber Rabbitbrush	no	yes
Utah Serviceberry	no	yes
Winterfat	yes	no

FERRON NATURAL GAS PROJECT AREA  
PROPONENT: ANADARKO

WELL #: A-6

**EPM 21: SURFACE DISTURBANCE MITIGATION FOR CRITICAL AND HIGH PRIORITY WINTER RANGE**

Pg. 1 of 1

The subject permit application is proposed within critical and high priority winter range (FEIS) and subject to EPM 21 requiring acre for acre mitigation for surface disturbance on critical winter range. The following condition comes from a cooperative agreement between the Texaco, Anadarko, Chandler (Companies), BLM-Price Field Office, the Utah Division of Wildlife Resources and the National Fish and Wildlife Foundation. The Companies agreed to the following:

1. Contribute \$1,301.26 (1998 dollars) for each Federal interest well (Federal surface and or subsurface ownership) permitted and drilled by the Companies (or on behalf of Companies by its contractor) on big game critical winter range as depicted in the FEIS Ferron Natural Gas Project Area. (Wells meeting the above criteria for which payment will be required, will be referred to as "subject wells".) This contribution will be adjusted annually for inflation based on the Consumer Price Index (CPI), see Section II.C.6. for the reference source used for the determination of the CPI and the date in which this annual adjustment will go into effect.

Since this mitigation program is designed to address impacts of all big game critical winter range surface disturbance (roads, well pads, pipelines, etc.), contributions will be required regardless of the success or failure of the subject well to produce.

- a. The recorded date for spudding for each subject well (the first boring of a hole during the drilling of a well) will serve as the reference date triggering the requirement for the mitigation contribution.
- b. Contributions will be submitted (in the form of an Company check, cashiers check or wire transfer) directly to the National Fish and Wildlife Foundation by the 1<sup>st</sup> of August and February for all subject wells spudded in the preceding six months as reported by the Bureau.
- c. All contributions will be made payable to the "National Fish and Wildlife Foundation re. Proj 99-270" and reference the "Ferron Natural Gas Wildlife Habitat Impact Mitigation Fund".

### C. REQUIRED APPROVALS, REPORTS AND NOTIFICATIONS

Required verbal notifications are summarized in Table 1, attached.

Building Location- Contact the BLM Natural Resource Protection Specialist at least 48-hours prior to commencing construction of location.

Spud- The spud date will be reported to BLM 24-hours prior to spudding. Written notification in the form of a Sundry Notice (Form 3160-5) will be submitted to the Moab Field Office within 24-hours after spudding, regardless of whether spud was made with a dry hole digger or big rig.

Daily Drilling Reports- Daily drilling reports shall detail the progress and status of the well and shall be submitted to the Moab Field Office on a weekly basis.

Monthly Reports of Operations- In accordance with Onshore Oil and Gas Order No. 1, this well shall be reported on Minerals Management Service (MMS) Form 3160, "Monthly Report of Operations," starting the month in which operations commence and continuing each month until the well is physically plugged and abandoned. This report will be filed directly with MMS.

Sundry Notices- There will be no deviation from the proposed drilling and/or workover program without prior approval. "Sundry Notices and Reports on Wells" (Form 3160-5) will be filed, with the Moab Field Office, for approval of all changes of plans and subsequent operations in accordance with 43 CFR § 3162.3-2. Safe drilling and operating practices must be observed.

Drilling Suspensions- Operations authorized by this permit shall not be suspended for more than 30 days without prior approval of the Moab Field Office. All conditions of this approval shall be applicable during any operations conducted with a replacement rig.

Undesirable Events- Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be immediately reported to the BLM in accordance with requirements of NTL-3A.

Cultural Resources- If cultural resources are discovered during construction, work that might disturb the resources is to stop, and the Price Field Office is to be notified.

First Production- Should the well be successfully completed for production, the Moab Field Office will be notified when the well is placed in producing status. Such notification may be made by phone, but must be followed by a sundry notice or letter not later than five business days following the date on which the well is placed into production.

A first production conference will be scheduled as soon as the productivity of the well is apparent. This conference should be coordinated through the Price Field Office. The Price Field Office shall be notified prior to the first sale.

Well Completion Report- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) will be submitted to the Moab Field Office not later than thirty-days after completion of the well or after completion of operations being performed, in accordance with 43 CFR § 3162.4-1. Two copies of all logs, core descriptions, core analyses, well test data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with Form 3160-4. When requested, samples (cuttings and/or samples) will be submitted to the Moab Field Office.

Venting/Flaring of Gas- Gas produced from this well may not be vented/flared beyond an initial, authorized test period of 30 days or 50 MMcf, whichever first occurs, without the prior, written approval of the Moab Field Office. Should gas be vented or flared without approval beyond the authorized test period, the well may be ordered shut-in until the gas can be captured or approval to continue the venting/flaring as uneconomic is granted. In such case, compensation to the lessor shall be required for that portion of the gas that is vented/flared without approval and which is determined to have been avoidably lost.

Produced Water- An application for approval of a permanent disposal method and location will be submitted to the Moab Field Office for approval pursuant to Onshore Oil and Gas Order 7.

Off-Lease Measurement, Storage, Commingling- Prior approval must be obtained from the Moab Field Office for off-lease measurement, off-lease storage and/or commingling (either down-hole or at the surface).

Plugging and Abandonment- If the well is completed as a dry hole, plugging instructions must be obtained from the Moab Field Office prior to initiating plugging operations.

A "Subsequent Report of Abandonment" (Form 3160-5) will be filed with the Moab Field Office within thirty-days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration. Upon completion of approved plugging, a regulation marker will be erected in accordance with 43 CFR § 3162.6. Final abandonment will not be approved until the surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the Price Field Office or the appropriate surface managing agency.



TABLE 1

NOTIFICATIONS

Notify Don Stephens (work: 435-636-3608, home: 435-637-7967) or Mike Kaminski (work: 435-636-3640, home: 435-637-2518) of the BLM, Price Field Office for the following:

2 days prior to commencement of dirt work, construction and reclamation;

1 day prior to spudding;

50 feet prior to reaching the surface casing setting depth

If the people above cannot be reached, notify the Moab Field Office at (435) 259-2100. If unsuccessful, contact the person listed below.

Well abandonment operations require 24 hour advance notice and prior approval. In the case of newly drilled dry holes, verbal approval can be obtained by calling the Moab Field Office at (435) 259-2100. If approval is needed after work hours, you may contact the following:

Eric Jones, Petroleum Engineer	Office: (435) 259-2117
	Home: (435) 259-2214

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

ENTITY ACTION FORM - FORM 6

OPERATOR Anadarko Petroleum Corporation

OPERATOR ACCT. NO. N 0035

ADDRESS P. O. Box 1330

Houston, Texas 77251-1330

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION					SPUD DATE	EFFECTIVE DATE
					QQ	SC	TP	RG	COUNTY		
A	99999	12649	4300730593	Helper Federal A-6		23	13S	10E	Carbon	11-20-99	
WELL 1 COMMENTS: <u>991130 entity added. KDR</u> <b>CONFIDENTIAL</b>											
A	99999	12650	4300730542	Helper Federal D-2		26	13S	10E	Carbon	11-13-99	
WELL 2 COMMENTS: <u>991130 entity added. KDR</u> <b>CONFIDENTIAL</b>											
A	99999	12651	4300730594	Helper Federal D-7		26	13S	10E	Carbon	11-19-99	
WELL 3 COMMENTS: <u>991130 entity added. KDR</u> <b>CONFIDENTIAL</b>											
A	99999	12652	4300730595	Helper Federal D-8		35	13S	10E	Carbon	11-18-99	
WELL 4 COMMENTS: <u>991130 entity added. KDR</u> <b>CONFIDENTIAL</b>											
A	99999	12653	4300730549	Helper Federal H-1		1	14S	10E	Carbon	11-16-99	
WELL 5 COMMENTS: <u>991130 entity added. KDR</u> <b>CONFIDENTIAL</b>											

ACTION CODES (See instructions on back of form)

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (explain in comments section)

NOTE: Use COMMENT section to explain why each Action Code was selected.

(3/89)

July Anderson  
Signature  
Regulatory Analyst 11-29-99  
Title Date  
Phone No. 281 874-8766

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

**CONFIDENTIAL****SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells.  
Use APPLICATION FOR PERMIT TO DRILL OR DEEPEN form for such purposes

1. Type of Well: OIL <input type="checkbox"/> GAS <input type="checkbox"/> OTHER: <u>coalbed methane</u>		5. Lease Designation and Serial Number
2. Name of Operator <u>Anadarko Petroleum Corporation</u>		6. Indian, Allottee or Tribe Name
3. Address and Telephone Number. <u>17001 Northchase Dr., Houston, Texas 77060</u> <u>(281) 874-8766</u>		7. Unit Agreement Name
4. Location of Well Footages: _____ County: <u>Carbon</u> QQ, Sec., T., R., M.: <u>13S 10E 23 43 007 30S93</u> State: <u>UT</u>		8. Well Name and Number
		9. API Well Number
		10. Field and Pool, or Wildcat <u>Helper Field</u>

11. **CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

NOTICE OF INTENT (Submit in Duplicate)		SUBSEQUENT REPORT (Submit Original Form Only)	
<input type="checkbox"/> Abandon	<input type="checkbox"/> New Construction	<input type="checkbox"/> Abandon*	<input type="checkbox"/> New Construction
<input type="checkbox"/> Repair Casing	<input type="checkbox"/> Pull or Alter Casing	<input type="checkbox"/> Repair Casing	<input type="checkbox"/> Pull or Alter Casing
<input type="checkbox"/> Change of Plans	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Change of Plans	<input type="checkbox"/> Perforate
<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Perforate	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Vent or Flare
<input type="checkbox"/> Fracture Treat or Acidize	<input type="checkbox"/> Vent or Flare	<input type="checkbox"/> Fracture Treat or Acidize	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Multiple Completion	<input type="checkbox"/> Water Shut-Off	<input type="checkbox"/> Other _____	<u>Weekly Reports</u>
<input type="checkbox"/> Other _____		Date of work completion _____	
Approximate date work will start _____		Report results of <b>Multiple Completions</b> and <b>Recompletions</b> to different reservoirs on WELL COMPLETION OR RECOMPLETION REPORT AND LOG form.	
		* Must be accompanied by a cement verification report.	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Weekly Reports for the following wells (Week Ending 11-26-99)  
Helper Federal A-6, B-7, D-2, D-7, D-8, H-2

**RECEIVED**

DEC - 3 1999

DIVISION OF OIL, GAS &amp; MINING

13. Name & Signature Judy Davidson Title Regulatory Analyst Date 11-29-99

(This space for State use only)

ANADARKO PETROLEUM CORPORATION  
WELL HISTORY  
ONSHORE - U.S.

CONFIDENTIAL

HELPER FEDERAL A-6, HELPER FIELD, 1275 FSL & 933 FEL, SEC 23-13S-10E, CARBON, CO., UT, WI  
1.00, NRI 0.875, AFE #18587, ETD 4200', GLE 6470' (FERRON), ELLENBURG RIG 15. API #43-007-30593

11/22/1999 793' (468') **DRILLING**, MW AIR  
DFS 01 PRESET & CMTD 8-5/8" SURF CSG @ 325', MIRU, NU BOP, DRLG CMT F/ 292'-325', SPUD  
@ 2000 11/20/99, AIR DRLG F/ 325'-793', NO SURVEYS TAKEN  
CC \$30,000

11/23/1999 4160' (767') **RUNNING 5-1/2" CSG**, MW AIR  
DFS 03 AIR DRILL TO 4160', C&C HOLE, TOH FOR LOGS, RUN O/H LOGS, TIH W/ CSG,  
LAST SURVEY @ 1822' - 4.25°  
CC: \$90,000

11/24/1999 4160' (0') **RIG RELEASED**.  
DFS 04 RAN 100 JTS OF 5-1/2", 17#, N-80, LT&C CSG, TAG FILL @ 4110', PMP 200 BW, NO CIRC,  
PMP PILL & WASH TO 4120', STUCK PIPE, CSG SET @ 4110', CMT CSG W/ 130 SKS PREM  
PLUS (14.2 PPG) W/ NO RETURNS, ND BOP, SET SLIPS, **RELEASE RIG @ 300 11/23/99**.  
LAST SURVEY @ 1822' - 4.25°. **TEMP DROP FROM REPORT - WO COMPLETION**.  
CC: \$N/A

January 28, 1999

Ms. Carol Daniels  
State of Utah  
Division of Oil, Gas and Mining  
1594 West North Temple, Suite 1210  
Salt Lake City, Utah 84114-5801

CONFIDENTIAL  
**Anadarko**  
RECEIVED  
FEB 03 2000  
DIVISION OF  
OIL, GAS AND MINING

Dear Ms. Daniels:

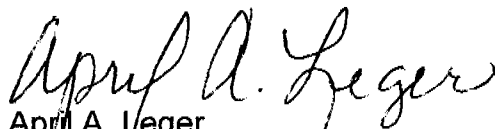
Enclosed is a copy of all the logs we have left on the Helper Federal wells filed with the BLM that you requested.

I am also enclosing a copy of the Federal Completion Reports that we filed with the BLM on the last remaining wells we drilled in 1999. Please note that we were unable to complete the Helper Federal A-6 due to winter season we plan to finish at the end on winter season in April 2000. I will be sure to forward you a copy of the amended report upon completion of the well.

Should you have any questions or require additional information, please feel free to contact me at this letterhead address or at (281) 873-3899.

Sincerely,

ANADARKO PETROLEUM CORPORATION



April A. Leger  
Sr. Engineering Technician

Enclosures-Logs, BLM Form 3160-4, BLM Form 3160-5

cc: AAL  
Shad

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

CONFIDENTIAL

FORM APPROVED  
OMB NO. 1004-0137  
Expires: November 30, 2000

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Dry <input checked="" type="checkbox"/> Other Coalbed Methane						5. Lease Serial No. UTU-58434			
b. Type of Completion: <input checked="" type="checkbox"/> New Well <input type="checkbox"/> Work Over <input type="checkbox"/> Deepen <input type="checkbox"/> Plug Back <input type="checkbox"/> Diff. Resvr., Other _____						6. If Indian, Allottee or Tribe Name			
2. Name of Operator Anadarko Petroleum Corp.						7. Unit or CA Agreement Name and No.			
3. Address 17001 Northchase Dr., Houston, Texas 77060				3a. Phone No. (include area code) (281) 875-1101		8. Lease Name and Well No. Helper Federal A-6			
4. Location of Well (Report location clearly and in accordance with Federal requirements)* At surface 1275' FSL & 933' FEL of Section 23-T13S-R10E  At top prod. interval reported below same  At total depth same						9. API Well No. 4300730593			
14. Date Spudded 11/20/99						10. Field and Pool, or Exploratory Helper CBM			
15. Date T.D. Reached 11/24/99						11. Sec., T., R., M., or Block and Survey or Area Sec. 23-T13S-R10E			
16. Date Completed <input type="checkbox"/> D & A <input type="checkbox"/> Ready to Prod.						12. County or Parish Carbon			
17. Elevations (DF, RKB, RT, GL)* 6470' G.L.						13. State Utah			
18. Total Depth: MD TVD		4160'		19. Plug Back T.D.: MD TVD		20. Depth Bridge Plug Set: MD None TVD			
21. Type Electric & Other Mechanical Logs Run (Submit copy of each) GR\CALP\DRHO\DP\SMP---NO CBL RAN YET						22. Was well cored? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit analysis) Was DST run <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit report) Directional Survey? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit)			
23. Casing and Liner Record (Report all strings set in well)									
Hole Size	Size/Grade	Wt. (#ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
8 5/8"	J-55	24#	0	325'		150 SXS		SURFACE	NONE
5 1/2"	N-80	17#	0	4160'		130 SXS			NONE
24. Tubing Record									
Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	
25. Producing Intervals									
Formation	Top	Bottom	Perforated Interval		Size	No. Holes	Perf. Status		
A)									
B)									
C)									
D)									
26. Perforation Record									
27. Acid, Fracture, Treatment, Cement Squeeze, Etc.									
Depth Interval		Amount and Type of Material							
28. Production - Interval A									
Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. →	Oil BBL	Gas MCF	Water BBL	Gas: Oil Ratio	Well Status	
WAITING-END OF WINTER SEASON TO FINISH									
28a. Production-Interval B									
Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. →	Oil BBL	Gas MCF	Water BBL	Gas: Oil Ratio	Well Status	

RECEIVED

FEB 03 2000

DIVISION OF  
OIL, GAS AND MINING

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. →	Oil BBL	Gas MCF	Water BBL	Gas: Oil Ratio	Well Status	

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. →	Oil BBL	Gas MCF	Water BBL	Gas: Oil Ratio	Well Status	

WAITING OF END OF WINTER TO COMPLETE

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth

**33. Circle enclosed attachments:**

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)\*

Title PRODUCTION ENGINEER

Date 1/24/00

~~CONFIDENTIAL~~



May 16, 2000

Bureau of Land Management  
82 East Dogwood  
Moab, Utah 84532  
Attn: Ms. Marie McGann

CONFIDENTIAL

Re: Form 3160-4  
Well Completion Report and Log  
Helper Federal A-6

Dear Ms. McGann:

Please find enclosed, a Form 3160-4, (in duplicate) Well Completion Report and Logs for the above mentioned well. This well was drilled in November but could not be completed until the winter season was over. We filed the initial report on this well on January 24, 2000 with the initial logs but we wanted to follow-up with the additional information and remaining logs.

Should you require any additional information, please contact me at (281) 873-3899.

Best regards,

ANADARKO PETROLEUM CORPORATION

*April A. Leger*  
April A. Leger  
Sr. Technical Assistant

Cc: Bureau of Land Management  
Price River Resources Area  
125 South, 600 West  
Price, Utah 84501

Utah Division of Oil, Gas and Mining  
1594 West North Temple, Suite 1210  
P.O. Box 145801  
Salt Lake City, Utah 84114-5801

RECEIVED

MAY 17 2000

DIVISION OF  
OIL, GAS AND MINING



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM APPROVED  
OMB NO. 1004-0137  
Expires: November 30, 2000

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well ☐ Oil Well ☐ Gas Well ☐ Dry ☒ Other Coalbed Methane  
b. Type of Completion: ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr.,  
Other

2. Name of Operator

Anadarko Petroleum Corp.

3. Address

17001 Northchase Dr., Houston, Texas 77060

3a. Phone No. (include area code)

(281) 875-1101

4. Location of Well (Report location clearly and in accordance with Federal requirements)\*

At surface 1275' FSL &amp; 933' FEL of Section 23-T13S-R10E

At top prod. interval reported below same

At total depth same

CONFIDENTIAL

5. Lease Serial No.

UTU-58434

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No.

8. Lease Name and Well No.

Helper Federal A-6

9. API Well No.

4300730593

10. Field and Pool, or Exploratory

Helper CBM

11. Sec., T., R., M., or Block and

Survey or Area Sec. 23-T13S-R10E

12. County or Parish

Carbon

13. State

Utah

17. Elevations (DF, RKB, RT, GL)\*

6470' G.L.

14. Date Spudded

11/20/99

15. Date T.D. Reached

11/24/99

16. Date Completed

☐ D & A☒ Ready to Prod.

4-30-99

18. Total Depth: MD

4160'

TVD

19. Plug Back T.D.: MD

4044'

TVD

20. Depth Bridge Plug Set: MD None

TVD

21. Type Electric &amp; Other Mechanical Logs Run (Submit copy of each)

GRV\CALP\DRHO\DP\SMP\CBL - Rec. 6-12-00

22. Was well cored? ☒ No ☐ Yes (Submit analysis)Was DST run ☒ No ☐ Yes (Submit report)Directional Survey? ☒ No ☐ Yes (Submit)

23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
8 5/8"	J-55	24#	0	325'		150 SXS		SURFACE	NONE
5 1/2"	N-80	17#	0	4160'		130 SXS		2750'	NONE

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2 7/8"	3939'							

25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) Ferron Coal	3758'	3858'	3758' - 3858'	.45 EHD	24	OPEN
B)						
C)						
D)						

27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
3758-3760	Pump 80,000 gals of Gel and 80,000 # of 16/30 Sand
3774-3776	Pump 35,000 gals of Gel and 34,000 # of 16/30 Sand
3818-3820	Pump 36,500 gals of Gel and 52,200 # of 16/30 Sand
3856-3858	Pump 42,000 gals of Gel and 11,000 # of 16/30 Sand

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity	Gas Gravity	Production Method
4/30/99	5/13/00	24	→	0	150	50	N/A		Pumping Rod Pump 2 1/2" X 2" X 16'
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. →	Oil BBL	Gas MCF	Water BBL	Gas: Oil Ratio	Well Status	
OPEN		20	→	0	150	50	N/A	Producing	

28a. Production-Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. →	Oil BBL	Gas MCF	Water BBL	Gas: Oil Ratio	Well Status	
			→						

DIVISION OF  
OIL, GAS AND MINING

## 28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. →	Oil BBL	Gas MCF	Water BBL	Gas: Oil Ratio	Well Status	

## 28c. Production-Interval D

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. →	Oil BBL	Gas MCF	Water BBL	Gas: Oil Ratio	Well Status	

## 29. Disposition of Gas (Sold, used for fuel, vented, etc.)

Vented

## 30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries

## 31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth
Ferron Sands	3720	3757		Ferron Sandstone	3720
Ferron Coal	3757	3914		Ferron Coal	3757
Tununk Shale	3914	4160		Tununk Shale	3914

## 32. Additional remarks (include plugging procedure):

## 33. Circle enclosed attachments:

1. Electrical/Mechanical Logs (1 full set req'd)    2. Geologic Report    3. DST Report    4. Directional Survey  
 5. Sundry Notice for plugging and cement verification    6. Core Analysis    7. Other

## 34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)\*

Name (please print) SHAD FRAZIERTitle PRODUCTION ENGINEERSignature Date 5/16/00

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

# Helper Federal A-

1275' FSL & 933' FEL Sec 23-13S-10E  
API 43-007-30593

LAST REVISED: 05/10/00

# Anadarko

  
Petroleum Corporation

	SPUD	RIG OFF
SURFACE	11/22/99	11/23/99
PRODUCTION	04/22/00	
WI%	100%	NRI% 87.50000%

12-1/4" Hole  
8-5/8" 24# J-55  
TOC @ Surface  
150 SXS CMT

6474 GL KB 6486

TOC

325

2750

## Perforations

3758 - 3760

3774 - 3776

3818 - 3820

3856 - 3858

24 Total Holes

PBTD

7-7/8" Hole  
5-1/2", 17# N-80  
w/130 sxs cmt

TD 4160

3939

4044

4110

## DATE WELL WORK HISTORY

04/21/00 Frac Zone 3856-3858- Pump 42000 gals of gel and 11,000# of 16/30 sand  
Frac Zone 3818-3820 - Pump 36500gals of gel and 52,000 # of 16/30 sand  
Frac Zone 3774-3776 - Pump 35000gals of gel and 34,000 # of 16/30 sand  
Frac Zone 3758-3760 - Pump 80000 gals of gel and 80,000 # of 16/30 sand

CONFIDENTIAL

RECEIVED

DIVISION OF  
OIL, GAS AND MINING

## NOTES:

### SURFACE STRING

8 5/8 24# J-55 set @ 325 Total Capacity: 21 bbl  
CEMENT: Type: Class G  
Volume: 150 sxs Calc. Top: Surface

### PRODUCTION STRING

5.5" 17# - set @ 4110 FC@ Burst: 7740 psi  
Hole Size: 7 7/8 FS@ Collapse: 6280 psi  
TD: 4110 Capacity: 0.0232 bbl/ft  
CEMENT: Class G Type: 14.2 ppg Number of Joints: 100  
Volume: 130 sxs

### TUBING & TOOLS

I.D. 2.441 Burst: 11199 psi  
2 3/8" 4.7 # 8rd EUE EOT @ 3939 Collapse: 11776 psi  
Disc: SN@ Capacity: 0.00387 bbl/ft

### RQD STRING

3/4 Rods  
7/8" Rods  
1 1/2" Rods

### DEVIATION ANGLE

4.25 1822

### FORMATION

FORMATION	TOP	KB	6486
FERRON SS	3720	2766	
FERRON COAL	3757	2729	
TUNUNK SHALE	3914	2572	
Sand pay	0		
Gross Coal	21		



June 8, 2000

Ms. Carol Daniels  
State of Utah  
Division of Oil, Gas and Mining  
1594 West North Temple, Suite 1210  
Salt Lake City, Utah 84114-5801

CONFIDENTIAL

Dear Ms. Daniels:

Enclosed is a copy of all the logs we have on the Helper Federal A-6 well filed with the BLM that you requested. *Logs filed in log file/copy*

I assume you did receive the completion paperwork that was filed already. This well had been delayed due to the winter season and we had to resume well completion when the season was over.

Should you have any questions or require additional information, please feel free to contact me at this letterhead address or at (281) 873-3899.

Sincerely,

ANADARKO PETROLEUM CORPORATION

April A. Leger  
Sr. Engineering Technician

Enclosures- 2 LOGS

cc: AAL  
Shad

RECEIVED

JUN 12 2000

DIVISION OF  
OIL, GAS AND MINING

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB NO. 1004-0135  
Expires: November 30, 2000

**SUNDRY NOTICES AND REPORTS ON WELLS**

*Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.*

**SUBMIT IN TRIPLICATE - Other instructions on reverse side**

1. Type of Well  
☐ Oil Well ☐ Gas Well ☒ Other **CONFIDENTIAL** Coalbed Methane

2. Name of Operator  
Anadarko Petroleum Corporation

3a. Address  
17001 Northchase Dr., Houston, Texas 77060

3b. Phone No. (include area code)  
(281) 875-1101

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
Surface & BHL: 1275' FSL & 933' FEL of Sec. 23, T13S, R10E

5. Lease Serial No.  
UTU-58434

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or N

8. Well Name and No.  
Helper Federal  
A-6

9. API Well No.  
4300730593

10. Field and Pool, or Exploratory Area  
Helper CBM

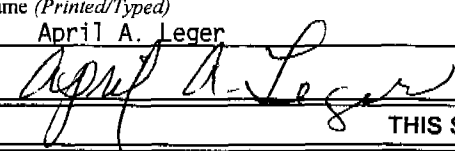
11. County or Parish, State  
Carbon County UT

**12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	1ST GAS SALES
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.)

1ST GAS SALES & HOOKUP: 10/01/00

14. I hereby certify that the foregoing is true and correct Name (Printed/Typed) April A. Leger		Title Sr. Engineering Technician
		Date 02-16-01
THIS SPACE FOR FEDERAL OR STATE OFFICE USE		
Approved by	Title	Date
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.		Office
Title 18 U.S.C. Section 1001, and Title 43 U.S.C. Section 1212, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.		

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0135  
Expires: January 31, 2004

**SUNDRY NOTICES AND REPORTS ON WELLS**  
**Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.**

**SUBMIT IN TRIPLICATE - Other instructions on reverse side**

1. Type of Well

☐ Oil Well ☐ Gas Well ☒ Other Coal Bed Methane

2. Name of Operator

Anadarko Petroleum Corporation

3a. Address

2515 Foothill Boulevard, Suite 300, Rock Springs, WY 82901

3b. Phone No. (include area code)

307-352-3303

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

1275' FSL, 933' FEL, SESE 23-13S-10E

5. Lease Serial No.

UTU-58434

6. If Indian, Allottee or Tribe Name

NA

7. If Unit or CA/Agreement, Name and/or No.

NA

8. Well Name and No.

Helper Federal A-6

9. API Well No.

43-007-30593

10. Field and Pool, or Exploratory Area

Helper

11. County or Parish, State

Carbon County, Utah

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other Gas Measurement
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

3. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomple horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recomple in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Approval is requested for the use of Electronic ThermoFlow Automate recorders for allocation of gas measurement on the above well. The Electronic ThermoFlow recorders will be installed in accordance with the manufacturer's specifications and will meet Bureau of Land Management standards. The recorders will be electronic (Flow Automates) and will record real time differential, static and temperature. All measurement will take place on the individual well location in accordance with Bureau of Land Management standards.

DIV. OF OIL, GAS & MINING

14. I hereby certify that the foregoing is true and correct  
Name (Printed/Typed)

Robert S. Flansburg

Title Measurement Supervisor

Signature

*Robert S. Flansburg*

Date September 29, 2003

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by (Signature)

Name  
(Printed/Typed)

Title

Office

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on next page)

Accepted by the  
Utah Division of  
Oil, Gas and Mining

Date:

*10/16/2003*

By:

*D. S. Flansburg*

Federal Approval Of This  
Action Is Necessary

COPIES SENT TO OPERATOR  
Date: *10-21-03*  
Initials: *CHD*

Division of Oil, Gas and Mining  
**OPERATOR CHANGE WORKSHEET (for state use only)**

ROUTING

CDW

**X - Change of Operator (Well Sold)**

Operator Name Change/Merger

The operator of the well(s) listed below has changed, effective:

**4/1/2013**

**FROM: (Old Operator):**

N0035-Anadarko Petroleum Corporation  
 PO Box 173779  
 Denver, CO, 80214

Phone: 1 (720) 929-6000

**TO: ( New Operator):**

N3940- Anadarko E&P Onshore LLC  
 PO Box 173779  
 Denver, CO 802014

Phone: 1 (720) 929-6000

**CA No.**

**Unit:**

WELL NAME	SEC	TWN	RNG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS
See Attached List								

**OPERATOR CHANGES DOCUMENTATION**

Enter date after each listed item is completed

- (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 4/9/2013
- (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 4/9/2013
- The new company was checked on the **Department of Commerce, Division of Corporations Database** on: 4/10/2013
- a. Is the new operator registered in the State of Utah: Business Number: 593715-0161
- a. (R649-9-2) Waste Management Plan has been received on: Yes
- b. Inspections of LA PA state/fee well sites complete on: 4/10/2013
- c. Reports current for Production/Disposition & Sundries on: 4/10/2013
- Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: BLM 4/2/2013 BIA N/A
- Federal and Indian Units:**  
The BLM or BIA has approved the successor of unit operator for wells listed on: N/A
- Federal and Indian Communization Agreements ("CA"):**  
The BLM or BIA has approved the operator for all wells listed within a CA on: N/A
- Underground Injection Control ("UIC")** Division has approved UIC Form 5 Transfer of Authority to **Inject**, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: 4/10/2013

**DATA ENTRY:**

- Changes entered in the **Oil and Gas Database** on: 4/11/2013
- Changes have been entered on the **Monthly Operator Change Spread Sheet** on: 4/11/2013
- Bond information entered in RBDMS on: 4/10/2013
- Fee/State wells attached to bond in RBDMS on: 4/11/2013
- Injection Projects to new operator in RBDMS on: 4/11/2013
- Receipt of Acceptance of Drilling Procedures for APD/New on: N/A

**BOND VERIFICATION:**

- Federal well(s) covered by Bond Number: WYB000291
- Indian well(s) covered by Bond Number: N/A
- a. (R649-3-1) The **NEW** operator of any state/fee well(s) listed covered by Bond Number 22013542
- b. The **FORMER** operator has requested a release of liability from their bond on: N/A

**LEASE INTEREST OWNER NOTIFICATION:**

- (R649-2-10) The **NEW** operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: 4/11/2013

**COMMENTS:**

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <u>CBM Wells</u>		5. LEASE DESIGNATION AND SERIAL NUMBER: See Wells
2. NAME OF OPERATOR: Anadarko Petroleum Corporation		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
3. ADDRESS OF OPERATOR: P.O. Box 173779 CITY Denver STATE CO ZIP 80217		7. UNIT or CA AGREEMENT NAME:
PHONE NUMBER: (720) 929-6000		8. WELL NAME and NUMBER:
4. LOCATION OF WELL FOOTAGES AT SURFACE:		9. API NUMBER: See Wells
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:		10. FIELD AND POOL, OR WILDCAT:
COUNTY:		STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA			
TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: <u>4/8/2013</u>	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion:	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input checked="" type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER:
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

The operator is requesting authorization to transfer the wells from Anadarko Petroleum Corporation and Anadarko Production Company to Anadarko E&P Onshore, LLC. Please see the attached list of 181 wells that are currently filed under Anadarko Petroleum Corporation and Anadarko Production Company. The state/fee wells will be under bond number 22013542, and the federal wells will be under bond number WYB000291.

Effective 4/1/13

Please contact the undersigned if there are any questions.

RECEIVED  
APR 09 2013

*Jaime Scharnowske*

Jaime Scharnowske  
Regulatory Analyst

Anadarko Petroleum Corporation N0035  
P.O. Box 173779  
Denver, CO 80214  
(720) 929-6000

*Jaime Scharnowske* DIV. OF OIL, GAS & MINING

Jaime Scharnowske  
Regulatory Analyst

Anadarko E&P Onshore, LLC N3940  
P.O. Box 173779  
Denver, CO 80214  
(720) 929-6000

NAME (PLEASE PRINT) <u>Jaime Scharnowske</u>	TITLE <u>Regulatory Analyst</u>
SIGNATURE <i>Jaime Scharnowske</i>	DATE <u>4/8/2013</u>

(This space for State use only)

APPROVED

APR 11 2013

*Rachel Medina*



Anadarko Petroleum Corporation (N0035) to Anadarko E&P Onshore, LLC (N3940)  
Effective 1<sup>st</sup> April-2013

Well Name	Sec	Twnshp	Range	API	Entity No.	Lease Type	Well Type	Well status
HELPER ST SWD 1	03	140S	100E	4300730361	12258	State	WD	A
FED F-2 SWD	08	140S	100E	4300730555	12557	Federal	WD	A
CLAWSON SPRING ST SWD 4	13	160S	080E	4301530477	12979	State	WD	A
CLAWSON SPRING ST SWD 1	36	150S	080E	4300730721	12832	State	WD	I
HELPER FED B-1	33	130S	100E	4300730189	11537	Federal	GW	P
HELPER FED A-1	23	130S	100E	4300730190	11517	Federal	GW	P
HELPER FED A-3	22	130S	100E	4300730213	11700	Federal	GW	P
HELPER FED C-1	22	130S	100E	4300730214	11702	Federal	GW	P
HELPER FED B-5	27	130S	100E	4300730215	11701	Federal	GW	P
HELPER FED A-2	22	130S	100E	4300730216	11699	Federal	GW	P
HELPER FED D-1	26	130S	100E	4300730286	12061	Federal	GW	P
BIRCH A-1	05	140S	100E	4300730348	12120	Fee	GW	P
HELPER ST A-1	03	140S	100E	4300730349	12122	State	GW	P
HELPER ST D-7	04	140S	100E	4300730350	12121	State	GW	P
CHUBBUCK A-1	31	130S	100E	4300730352	12397	Fee	GW	P
VEA A-1	32	130S	100E	4300730353	12381	Fee	GW	P
VEA A-2	32	130S	100E	4300730354	12483	Fee	GW	P
VEA A-3	32	130S	100E	4300730355	12398	Fee	GW	P
VEA A-4	32	130S	100E	4300730356	12482	Fee	GW	P
HELPER ST A-8	02	140S	100E	4300730357	12257	State	GW	P
HELPER ST A-3	02	140S	100E	4300730358	12254	State	GW	P
HELPER ST A-4	02	140S	100E	4300730359	12255	State	GW	P
HELPER ST A-7	02	140S	100E	4300730360	12256	State	GW	P
HELPER ST A-2	03	140S	100E	4300730362	12232	State	GW	P
HELPER ST A-5	03	140S	100E	4300730363	12231	State	GW	P
HELPER ST A-6	03	140S	100E	4300730364	12233	State	GW	P
HELPER ST D-4	04	140S	100E	4300730365	12228	State	GW	P
HELPER ST D-3	05	140S	100E	4300730366	12184	State	GW	P
HELPER ST D-5	04	140S	100E	4300730367	12226	State	GW	P
HELPER ST D-8	04	140S	100E	4300730368	12229	State	GW	P
HELPER ST D-2	05	140S	100E	4300730369	12481	State	GW	P
HELPER ST D-6	05	140S	100E	4300730370	12234	State	GW	P
HELPER ST D-1	06	140S	100E	4300730371	12399	State	GW	P
BIRCH A-2	08	140S	100E	4300730372	12189	Fee	GW	P
HELPER ST A-9	10	140S	100E	4300730373	12230	State	GW	P
HELPER ST B-1	09	140S	100E	4300730376	12227	State	GW	P
HELPER FED F-3	08	140S	100E	4300730378	12252	Federal	GW	P
HELPER FED F-4	09	140S	100E	4300730379	12253	Federal	GW	P
HELPER ST A-10	10	140S	100E	4300730433	12488	State	GW	P
HELPER ST A-11	11	140S	100E	4300730434	12487	State	GW	P
HELPER ST A-12	10	140S	100E	4300730435	12486	State	GW	P
HELPER ST A-13	10	140S	100E	4300730436	12485	State	GW	P
HELPER ST B-2	09	140S	100E	4300730437	12484	State	GW	P
HELPER FED E-7	19	130S	100E	4300730508	13623	Federal	GW	P
HELPER FED B-2	33	130S	100E	4300730530	12619	Federal	GW	P
HELPER FED B-3	33	130S	100E	4300730531	12622	Federal	GW	P
HELPER FED B-4	33	130S	100E	4300730532	12623	Federal	GW	P
HELPER FED B-6	27	130S	100E	4300730533	12644	Federal	GW	P
HELPER FED B-7	27	130S	100E	4300730534	12645	Federal	GW	P
HELPER FED B-8	27	130S	100E	4300730535	12631	Federal	GW	P

Anadarko Petroleum Corporation (N0035) to Anadarko E&P Onshore, LLC (N3940)  
Effective 1-April-2013

Well Name	Sec	Twnshp	Range	API	Entity No.	Lease Type	Well Type	Well status
HELPER FED B-9	34	130S	100E	4300730536	12646	Federal	GW	P
HELPER FED B-10	34	130S	100E	4300730537	12626	Federal	GW	P
HELPER FED B-11	34	130S	100E	4300730538	12628	Federal	GW	P
HELPER FED B-12	34	130S	100E	4300730539	12627	Federal	GW	P
HELPER FED B-13	28	130S	100E	4300730540	12621	Federal	GW	P
HELPER FED B-14	28	130S	100E	4300730541	12620	Federal	GW	P
HELPER FED D-2	26	130S	100E	4300730542	12650	Federal	GW	P
HELPER FED D-3	26	130S	100E	4300730543	12634	Federal	GW	P
HELPER FED D-4	35	130S	100E	4300730544	12625	Federal	GW	P
HELPER FED D-5	35	130S	100E	4300730545	12637	Federal	GW	P
HELPER FED D-6	35	130S	100E	4300730546	12635	Federal	GW	P
HELPER FED E-1	29	130S	100E	4300730547	13246	Federal	GW	P
HELPER FED E-2	29	130S	100E	4300730548	12636	Federal	GW	P
HELPER FED H-1	01	140S	100E	4300730549	12653	Federal	GW	P
HELPER FED H-2	01	140S	100E	4300730550	12647	Federal	GW	P
OLIVETO FED A-2	08	140S	100E	4300730556	12630	Federal	GW	P
HELPER FED F-1	08	140S	100E	4300730557	12629	Federal	GW	P
SMITH FED A-1	09	140S	100E	4300730558	13004	Federal	GW	P
SE INVESTMENTS A-1	06	140S	100E	4300730570	12624	Fee	GW	P
HELPER ST A-14	11	140S	100E	4300730571	12612	State	GW	P
HELPER ST A-15	11	140S	100E	4300730572	12613	State	GW	P
HELPER ST E-1	36	130S	100E	4300730573	12615	State	GW	P
HELPER ST E-2	36	130S	100E	4300730574	12614	State	GW	P
HARMOND A-1	07	140S	100E	4300730586	12616	Fee	GW	P
HELPER ST E-3	36	130S	100E	4300730592	12868	State	GW	P
HELPER FED A-6	23	130S	100E	4300730593	12649	Federal	GW	P
HELPER FED D-7	26	130S	100E	4300730594	12651	Federal	GW	P
HELPER FED D-8	35	130S	100E	4300730595	12652	Federal	GW	P
CLAWSON SPRING ST A-1	36	150S	080E	4300730597	12618	State	GW	P
HELPER ST E-4	36	130S	100E	4300730598	12825	State	GW	P
HELPER ST A-16	11	140S	100E	4300730603	12638	State	GW	P
CHUBBUCK A-2	06	140S	100E	4300730604	12648	Fee	GW	P
CLAWSON SPRING ST A-2	36	150S	080E	4300730635	12856	State	GW	P
CLAWSON SPRING ST A-3	36	150S	080E	4300730636	13001	State	GW	P
CLAWSON SPRING ST A-4	36	150S	080E	4300730637	12844	State	GW	P
CLAWSON SPRING ST D-5	31	150S	090E	4300730642	12852	State	GW	P
CLAWSON SPRING ST D-6	31	150S	090E	4300730643	12847	State	GW	P
CLAWSON SPRING ST D-7	31	150S	090E	4300730644	12849	State	GW	P
HELPER FED A-5	23	130S	100E	4300730677	13010	Federal	GW	P
HELPER FED A-7	22	130S	100E	4300730678	13346	Federal	GW	P
HELPER FED B-15	28	130S	100E	4300730679	13015	Federal	GW	P
HELPER FED B-16	28	130S	100E	4300730680	13203	Federal	GW	P
HELPER FED C-2	24	130S	100E	4300730681	13016	Federal	GW	P
HELPER FED C-4	24	130S	100E	4300730682	13012	Federal	GW	P
HELPER FED C-7	21	130S	100E	4300730684	13204	Federal	GW	P
HELPER FED D-9	25	130S	100E	4300730685	13245	Federal	GW	P
HELPER FED D-10	25	130S	100E	4300730686	12993	Federal	GW	P
HELPER FED D-11	25	130S	100E	4300730687	12992	Federal	GW	P
HELPER FED D-12	25	130S	100E	4300730688	13005	Federal	GW	P
HELPER FED E-4	29	130S	100E	4300730689	13229	Federal	GW	P

Anadarko Petroleum Corporation (N0035) to Anadarko E&P Onshore, LLC (N3940)  
Effective 1-April-2013

Well Name	Sec	Twnshp	Range	API	Entity No.	Lease Type	Well Type	Well status
HELPER FED A-4	23	130S	100E	4300730692	13009	Federal	GW	P
HELPER FED C-5	24	130S	100E	4300730693	13013	Federal	GW	P
HELPER FED G-1	30	130S	110E	4300730694	13006	Federal	GW	P
HELPER FED G-2	30	130S	110E	4300730695	13007	Federal	GW	P
HELPER FED G-3	31	130S	110E	4300730696	13002	Federal	GW	P
HELPER FED G-4	31	130S	110E	4300730697	13003	Federal	GW	P
HELPER FED H-3	01	140S	100E	4300730698	12831	Federal	GW	P
HELPER FED H-4	01	140S	100E	4300730699	12833	Federal	GW	P
CLAWSON SPRING ST D-8	31	150S	090E	4300730701	12851	State	GW	P
HELPER FED C-3	24	130S	100E	4300730702	13011	Federal	GW	P
CLAWSON SPRING ST J-1	35	150S	080E	4300730726	13299	Fee	GW	P
PIERUCCI 1	35	150S	080E	4300730727	13325	Fee	GW	P
POTTER ETAL 1	35	150S	080E	4300730728	12958	Fee	GW	P
POTTER ETAL 2	35	150S	080E	4300730737	12959	Fee	GW	P
HELPER FED G-5	30	130S	110E	4300730770	13655	Federal	GW	P
HELPER FED G-6	30	130S	110E	4300730771	13656	Federal	GW	P
HELPER FED G-7	31	130S	110E	4300730772	13657	Federal	GW	P
HELPER FED G-8	31	130S	110E	4300730773	13658	Federal	GW	P
GOODALL A-1	06	140S	110E	4300730774	13348	Fee	GW	P
HELPER FED E-8	19	130S	100E	4300730776	13624	Federal	GW	P
HAUSKNECHT A-1	21	130S	100E	4300730781	13347	Fee	GW	P
HELPER FED E-9	19	130S	100E	4300730868	13628	Federal	GW	P
HELPER FED E-5	20	130S	100E	4300730869	13625	Federal	GW	P
HELPER FED E-6	20	130S	100E	4300730870	13631	Federal	GW	P
HELPER FED E-10	30	130S	100E	4300730871	13629	Federal	GW	P
SACCOMANNO A-1	30	130S	100E	4300730872	13622	Fee	GW	P
HELPER FED E-11	30	130S	100E	4300730873	13630	Federal	GW	P
BLACKHAWK A-2	29	130S	100E	4300730886	13783	Fee	GW	P
BLACKHAWK A-3	20	130S	100E	4300730914	13794	Fee	GW	P
BLACKHAWK A-4	21	130S	100E	4300730915	13795	Fee	GW	P
BLACKHAWK A-1X	20	130S	100E	4300730923	13798	Fee	GW	P
HELPER STATE 12-3	03	140S	100E	4300750070	17824	State	GW	P
HELPER STATE 32-3	03	140S	100E	4300750071	17827	State	GW	P
HELPER STATE 32-36	36	130S	100E	4300750072	17825	State	GW	P
VEA 32-32	32	130S	100E	4300750075	17826	Fee	GW	P
CLAWSON SPRING ST E-7	07	160S	090E	4301530392	12960	State	GW	P
CLAWSON SPRING ST E-8	07	160S	090E	4301530394	12964	State	GW	P
CLAWSON SPRING ST E-3	06	160S	090E	4301530403	12965	State	GW	P
CLAWSON SPRING ST E-1	06	160S	090E	4301530404	12966	State	GW	P
CLAWSON SPRING ST E-2	06	160S	090E	4301530405	12961	State	GW	P
CLAWSON SPRING ST E-4	06	160S	090E	4301530406	12962	State	GW	P
CLAWSON SPRING ST C-1	12	160S	080E	4301530410	12617	State	GW	P
CLAWSON SPRING ST B-1	01	160S	080E	4301530427	12845	State	GW	P
CLAWSON SPRING ST B-2	01	160S	080E	4301530428	12846	State	GW	P
CLAWSON SPRING ST B-3	01	160S	080E	4301530429	12848	State	GW	P
CLAWSON SPRING ST B-4	01	160S	080E	4301530430	12854	State	GW	P
CLAWSON SPRING ST B-5	12	160S	080E	4301530431	12963	State	GW	P
CLAWSON SPRING ST B-8	11	160S	080E	4301530432	12863	State	GW	P
CLAWSON SPRING ST B-9	11	160S	080E	4301530433	12864	State	GW	P
CLAWSON SPRING ST C-2	12	160S	080E	4301530434	12850	State	GW	P

Anadarko Petroleum Corporation (N0035) to Anadarko E&P Onshore, LLC (N3940)  
Effective 1-April-2013

Well Name	Sec	Twnshp	Range	API	Entity No.	Lease Type	Well Type	Well status
CLAWSON SPRING ST C-4	14	160S	080E	4301530435	13199	State	GW	P
CLAWSON SPRING ST B-7	11	160S	080E	4301530460	12967	State	GW	P
CLAWSON SPRING ST C-6	14	160S	080E	4301530461	13355	State	GW	P
CLAWSON SPRING ST C-3	12	160S	080E	4301530463	12968	State	GW	P
CLAWSON SPRING ST B-6	11	160S	080E	4301530465	12969	State	GW	P
CLAWSON SPRING ST H-1	13	160S	080E	4301530466	13323	State	GW	P
CLAWSON SPRING ST H-2	13	160S	080E	4301530467	12955	State	GW	P
CLAWSON SPRING ST IPA-1	10	160S	080E	4301530468	12956	Fee	GW	P
CLAWSON SPRING ST IPA-2	15	160S	080E	4301530469	13200	Fee	GW	P
CLAWSON SPRING ST E-5	07	160S	090E	4301530470	12971	State	GW	P
CLAWSON SPRING ST G-1	02	160S	080E	4301530471	13014	State	GW	P
CLAWSON SPRING ST F-2	03	160S	080E	4301530472	13282	State	GW	P
CLAWSON SPRING ST F-1	03	160S	080E	4301530473	13278	State	GW	P
CLAWSON SPRING ST E-6	07	160S	090E	4301530474	13052	State	GW	P
CLAWSON SPRING ST G-2	02	160S	080E	4301530475	12957	State	GW	P
CLAWSON SPRING ST M-1	02	160S	080E	4301530488	13201	State	GW	P
CLAWSON SPRING ST K-1	02	160S	080E	4301530489	13202	State	GW	P
SHIMMIN TRUST 3	14	120S	100E	4300730119	11096	Fee	GW	PA
SHIMMIN TRUST 1	11	120S	100E	4300730120	11096	Fee	GW	PA
SHIMMIN TRUST 2	14	120S	100E	4300730121	11096	Fee	GW	PA
SHIMMIN TRUST 4	11	120S	100E	4300730123	11096	Fee	GW	PA
ST 9-16	16	120S	100E	4300730132	11402	State	GW	PA
ST 2-16	16	120S	100E	4300730133	11399	State	GW	PA
MATTS SUMMIT ST A-1	14	120S	090E	4300730141	11273	State	GW	PA
SLEMAKER A-1	05	120S	120E	4300730158	11441	Fee	GW	PA
JENSEN 16-10	10	120S	100E	4300730161	11403	Fee	GW	PA
JENSEN 7-15	15	120S	100E	4300730165	11407	Fee	GW	PA
SHIMMIN TRUST 12-12	12	120S	100E	4300730168	11420	Fee	GW	PA
JENSEN 11-15	15	120S	100E	4300730175	11425	Fee	GW	PA
BRYNER A-1	11	120S	120E	4300730188	11503	Fee	GW	PA
BRYNER A-1X (RIG SKID)	11	120S	120E	4300730209	11503	Fee	GW	PA
BLACKHAWK A-1	20	130S	100E	4300730885	13798	Fee	D	PA
BLACKHAWK A-5H	20	130S	100E	4300731402	17029	Fee	D	PA
CLAWSON SPRING ST SWD 3	06	160S	090E	4301530476	12978	State	D	PA
HELPER FED C-6	21	130S	100E	4300730683	13008	Federal	GW	S
UTAH 10-415	10	160S	080E	4301530391	12632	State	GW	TA

	API Well Number	Well Name	Qtr/Qtr	Section	Township	Range	Mineral Lease Type	Mineral Lease Number	Well Status
1	4300730189	HELPER FED B-1	NESW	33	13S	10E	Federal	USA UTU 71392	Producing
2	4300730190	HELPER FED A-1	C-SW	23	13S	10E	Federal	USA UTU 58434	Producing
3	4300730213	HELPER FED A-3	SESE	22	13S	10E	Federal	USA UTU 58434	Producing
4	4300730214	HELPER FED C-1	SENE	22	13S	10E	Federal	USA UTU 71391	Producing
5	4300730215	HELPER FED B-5	NENE	27	13S	10E	Federal	USA UTU 71392	Producing
6	4300730216	HELPER FED A-2	NESW	22	13S	10E	Federal	USA UTU 58434	Producing
7	4300730286	HELPER FED D-1	SWNE	26	13S	10E	Federal	USA UTU 68315	Producing
8	4300730378	HELPER FED F-3	NENE	8	14S	10E	Federal	USA UTU 65762	Producing
9	4300730379	HELPER FED F-4	NWNW	9	14S	10E	Federal	USA UTU 65762	Producing
10	4300730508	HELPER FED E-7	SESE	19	13S	10E	Federal	USA UTU 77980	Producing
11	4300730530	HELPER FED B-2	SENE	33	13S	10E	Federal	USA UTU 71392	Producing
12	4300730531	HELPER FED B-3	NESE	33	13S	10E	Federal	USA UTU 71392	Producing
13	4300730532	HELPER FED B-4	NENE	33	13S	10E	Federal	USA UTU 71392	Producing
14	4300730533	HELPER FED B-6	NENW	27	13S	10E	Federal	USA UTU 71392	Producing
15	4300730534	HELPER FED B-7	NESW	27	13S	10E	Federal	USA UTU 71392	Producing
16	4300730535	HELPER FED B-8	SESE	27	13S	10E	Federal	USA UTU 71392	Producing
17	4300730536	HELPER FED B-9	SENE	34	13S	10E	Federal	USA UTU 71392	Producing
18	4300730537	HELPER FED B-10	NWNE	34	13S	10E	Federal	USA UTU 71392	Producing
19	4300730538	HELPER FED B-11	SESW	34	13S	10E	Federal	USA UTU 71392	Producing
20	4300730539	HELPER FED B-12	NESE	34	13S	10E	Federal	USA UTU 71392	Producing
21	4300730540	HELPER FED B-13	SWSE	28	13S	10E	Federal	USA UTU 71392	Producing
22	4300730541	HELPER FED B-14	SWSW	28	13S	10E	Federal	USA UTU 71392	Producing
23	4300730542	HELPER FED D-2	SWNW	26	13S	10E	Federal	USA UTU 68315	Producing
24	4300730543	HELPER FED D-3	SESW	26	13S	10E	Federal	USA UTU 68315	Producing
25	4300730544	HELPER FED D-4	NWNW	35	13S	10E	Federal	USA UTU 68315	Producing
26	4300730545	HELPER FED D-5	SESW	35	13S	10E	Federal	USA UTU 68315	Producing
27	4300730546	HELPER FED D-6	NWSE	35	13S	10E	Federal	USA UTU 68315	Producing
28	4300730547	HELPER FED E-1	NESE	29	13S	10E	Federal	USA UTU 71675	Producing
29	4300730548	HELPER FED E-2	SESW	29	13S	10E	Federal	USA UTU 71675	Producing
30	4300730549	HELPER FED H-1	NENW	1	14S	10E	Federal	USA UTU 72352	Producing
31	4300730550	HELPER FED H-2	SESW	1	14S	10E	Federal	USA UTU 72352	Producing
32	4300730556	OLIVETO FED A-2	NESW	8	14S	10E	Federal	USA UTU 65762	Producing
33	4300730557	HELPER FED F-1	SESE	8	14S	10E	Federal	USA UTU 65762	Producing
34	4300730558	SMITH FED A-1	NWSW	9	14S	10E	Federal	USA UTU 65762	Producing
35	4300730593	HELPER FED A-6	SESE	23	13S	10E	Federal	USA UTU 58434	Producing
36	4300730594	HELPER FED D-7	C-SE	26	13S	10E	Federal	USA UTU 68315	Producing
37	4300730595	HELPER FED D-8	NENE	35	13S	10E	Federal	USA UTU 68315	Producing
38	4300730677	HELPER FED A-5	NENE	23	13S	10E	Federal	USA UTU 58434	Producing
39	4300730678	HELPER FED A-7	SENE	22	13S	10E	Federal	USA UTU 58434	Producing
40	4300730679	HELPER FED B-15	SENE	28	13S	10E	Federal	USA UTU 71392	Producing
41	4300730680	HELPER FED B-16	SWNW	28	13S	10E	Federal	USA UTU 71392	Producing
42	4300730681	HELPER FED C-2	NENW	24	13S	10E	Federal	USA UTU 71391	Producing

API Well Number		Well Name	Qtr/Qtr	Section	Township	Range	Mineral Lease Type	Mineral Lease Number	Well Status
43	4300730682	HELPER FED C-4	NWSW	24	13S	10E	Federal	USA UTU 71391	Producing
44	4300730683	HELPER FED C-6	SWSE	21	13S	10E	Federal	USA UTU 71391	Shut-In
45	4300730684	HELPER FED C-7	SESW	21	13S	10E	Federal	USA UTU 71391	Producing
46	4300730685	HELPER FED D-9	NWNW	25	13S	10E	Federal	USA UTU 68315	Producing
47	4300730686	HELPER FED D-10	SENE	25	13S	10E	Federal	USA UTU 68315	Producing
48	4300730687	HELPER FED D-11	SESW	25	13S	10E	Federal	USA UTU 68315	Producing
49	4300730688	HELPER FED D-12	SESE	25	13S	10E	Federal	USA UTU 68315	Producing
50	4300730689	HELPER FED E-4	NWNE	29	13S	10E	Federal	USA UTU 71675	Producing
51	4300730692	HELPER FED A-4	SWNW	23	13S	10E	Federal	USA UTU 58434	Producing
52	4300730693	HELPER FED C-5	SWNE	24	13S	10E	Federal	USA UTU 71391	Producing
53	4300730694	HELPER FED G-1	C-NW	30	13S	11E	Federal	USA UTU 71677	Producing
54	4300730695	HELPER FED G-2	SWSW	30	13S	11E	Federal	USA UTU 71677	Producing
55	4300730696	HELPER FED G-3	SENW	31	13S	11E	Federal	USA UTU 71677	Producing
56	4300730697	HELPER FED G-4	SESW	31	13S	11E	Federal	USA UTU 71677	Producing
57	4300730698	HELPER FED H-3	SWNE	1	14S	10E	Federal	USA UTU 72352	Producing
58	4300730699	HELPER FED H-4	NESE	1	14S	10E	Federal	USA UTU 72352	Producing
59	4300730702	HELPER FED C-3	SESW	24	13S	10E	Federal	USA UTU 71391	Producing
60	4300730770	HELPER FED G-5	SWNE	30	13S	11E	Federal	USA UTU 71677	Producing
61	4300730771	HELPER FED G-6	SWSE	30	13S	11E	Federal	USA UTU 71677	Producing
62	4300730772	HELPER FED G-7	NWNE	31	13S	11E	Federal	USA UTU 71677	Producing
63	4300730773	HELPER FED G-8	NESE	31	13S	11E	Federal	USA UTU 71677	Producing
64	4300730776	HELPER FED E-8	SENE	19	13S	10E	Federal	USA UTU 77980	Producing
65	4300730868	HELPER FED E-9	SESW	19	13S	10E	Federal	USA UTU 77980	Producing
66	4300730869	HELPER FED E-5	SWSW	20	13S	10E	Federal	USA UTU 71675	Producing
67	4300730870	HELPER FED E-6	SWNW	20	13S	10E	Federal	USA UTU 71675	Producing
68	4300730871	HELPER FED E-10	NENW	30	13S	10E	Federal	USA UTU 71675	Producing
69	4300730873	HELPER FED E-11	NWNE	30	13S	10E	Federal	USA UTU 71675	Producing
70	4300730119	SHIMMIN TRUST 3	SENW	14	12S	10E	Fee (Private)		Plugged and Abandoned
71	4300730120	SHIMMIN TRUST 1	SESE	11	12S	10E	Fee (Private)		Plugged and Abandoned
72	4300730121	SHIMMIN TRUST 2	SENE	14	12S	10E	Fee (Private)		Plugged and Abandoned
73	4300730123	SHIMMIN TRUST 4	SESW	11	12S	10E	Fee (Private)		Plugged and Abandoned
74	4300730158	SLEMAKER A-1	SWNE	5	12S	12E	Fee (Private)		Plugged and Abandoned
75	4300730161	JENSEN 16-10	SESE	10	12S	10E	Fee (Private)		Plugged and Abandoned
76	4300730165	JENSEN 7-15	SWNE	15	12S	10E	Fee (Private)		Plugged and Abandoned
77	4300730168	SHIMMIN TRUST 12-12	NWSW	12	12S	10E	Fee (Private)		Plugged and Abandoned
78	4300730175	JENSEN 11-15	NESW	15	12S	10E	Fee (Private)		Plugged and Abandoned
79	4300730188	BRYNER A-1	NESE	11	12S	12E	Fee (Private)		Plugged and Abandoned
80	4300730209	BRYNER A-1X (RIG SKID)	NESE	11	12S	12E	Fee (Private)		Plugged and Abandoned
81	4300730348	BIRCH A-1	NWSW	5	14S	10E	Fee (Private)		Producing
82	4300730352	CHUBBUCK A-1	NESE	31	13S	10E	Fee (Private)		Producing
83	4300730353	VEA A-1	SWNW	32	13S	10E	Fee (Private)		Producing
84	4300730354	VEA A-2	NENE	32	13S	10E	Fee (Private)		Producing

API Well Number	Well Name	Qtr/Qtr	Section	Township	Range	Mineral Lease Type	Mineral Lease Number	Well Status
85	4300730355	VEA A-3	SESW	32	13S	10E	Fee (Private)	Producing
86	4300730356	VEA A-4	NWSE	32	13S	10E	Fee (Private)	Producing
87	4300730372	BIRCH A-2	NWNW	8	14S	10E	Fee (Private)	Producing
88	4300730570	SE INVESTMENTS A-1	NESE	6	14S	10E	Fee (Private)	Producing
89	4300730586	HARMOND A-1	SENE	7	14S	10E	Fee (Private)	Producing
90	4300730604	CHUBBUCK A-2	SENW	6	14S	10E	Fee (Private)	Producing
91	4300730726	CLAWSON SPRING ST J-1	SESW	35	15S	8E	Fee (Private)	Producing
92	4300730727	PIERUCCI 1	SENW	35	15S	8E	Fee (Private)	Producing
93	4300730728	POTTER ETAL 1	SWNE	35	15S	8E	Fee (Private)	Producing
94	4300730737	POTTER ETAL 2	NESE	35	15S	8E	Fee (Private)	Producing
95	4300730774	GOODALL A-1	NWSW	6	14S	11E	Fee (Private)	Producing
96	4300730781	HAUSKNECHT A-1	SWNW	21	13S	10E	Fee (Private)	Producing
97	4300730872	SACCOMANNO A-1	NESE	30	13S	10E	Fee (Private)	Producing
98	4300730885	BLACKHAWK A-1	SESE	20	13S	10E	Fee (Private)	Plugged and Abandoned
99	4300730886	BLACKHAWK A-2	NWNW	29	13S	10E	Fee (Private)	Producing
100	4300730914	BLACKHAWK A-3	SENE	20	13S	10E	Fee (Private)	Producing
101	4300730915	BLACKHAWK A-4	NENE	21	13S	10E	Fee (Private)	Producing
102	4300730923	BLACKHAWK A-1X	SESE	20	13S	10E	Fee (Private)	Producing
103	4300731402	BLACKHAWK A-5H	NENE	20	13S	10E	Fee (Private)	Plugged and Abandoned
104	4300750075	VEA 32-32	SWNE	32	13S	10E	Fee (Private)	Producing
105	4301530468	CLAWSON SPRING ST IPA-1	SESE	10	16S	8E	Fee (Private)	Producing
106	4301530469	CLAWSON SPRING ST IPA-2	NENE	15	16S	8E	Fee (Private)	Producing
107	4300730132	ST 9-16	NESE	16	12S	10E	State	ML-44443 Plugged and Abandoned
108	4300730133	ST 2-16	NWNE	16	12S	10E	State	ML-44443 Plugged and Abandoned
109	4300730141	MATTS SUMMIT ST A-1	NWNW	14	12S	9E	State	ML-44496 Plugged and Abandoned
110	4300730349	HELPER ST A-1	SENW	3	14S	10E	State	ST UT ML 45805 Producing
111	4300730350	HELPER ST D-7	NWSW	4	14S	10E	State	ST UT ML 45804 Producing
112	4300730357	HELPER ST A-8	NWSE	2	14S	10E	State	ST UT ML 45805 Producing
113	4300730358	HELPER ST A-3	NWNW	2	14S	10E	State	ST UT ML 45805 Producing
114	4300730359	HELPER ST A-4	NWNE	2	14S	10E	State	ST UT ML 45805 Producing
115	4300730360	HELPER ST A-7	NESW	2	14S	10E	State	ST UT ML 45805 Producing
116	4300730362	HELPER ST A-2	NENE	3	14S	10E	State	ST UT ML 45805 Producing
117	4300730363	HELPER ST A-5	NESW	3	14S	10E	State	ST UT ML 45805 Producing
118	4300730364	HELPER ST A-6	NESE	3	14S	10E	State	ST UT ML 45805 Producing
119	4300730365	HELPER ST D-4	SWNW	4	14S	10E	State	ST UT ML 45804 Producing
120	4300730366	HELPER ST D-3	NENE	5	14S	10E	State	ST UT ML 45804 Producing
121	4300730367	HELPER ST D-5	NWNE	4	14S	10E	State	ST UT ML 45804 Producing
122	4300730368	HELPER ST D-8	SESE	4	14S	10E	State	ST UT ML 45804 Producing
123	4300730369	HELPER ST D-2	NENW	5	14S	10E	State	ST UT ML 45804 Producing
124	4300730370	HELPER ST D-6	SESE	5	14S	10E	State	ST UT ML 45804 Producing
125	4300730371	HELPER ST D-1	NENE	6	14S	10E	State	ST UT ML 45804 Producing
126	4300730373	HELPER ST A-9	SENW	10	14S	10E	State	ST UT ML 45805 Producing

	API Well Number	Well Name	Qtr/Qtr	Section	Township	Range	Mineral Lease Type	Mineral Lease Number	Well Status
127	4300730376	HELPER ST B-1	SWNE	9	14S	10E	State	ST UT ML 47556	Producing
128	4300730433	HELPER ST A-10	NWNE	10	14S	10E	State	ST UT ML 45805	Producing
129	4300730434	HELPER ST A-11	SWNW	11	14S	10E	State	ST UT ML 45805	Producing
130	4300730435	HELPER ST A-12	NWSW	10	14S	10E	State	ST UT ML 45805	Producing
131	4300730436	HELPER ST A-13	NESE	10	14S	10E	State	ST UT ML 45805	Producing
132	4300730437	HELPER ST B-2	NESE	9	14S	10E	State	ST UT ML 47556	Producing
133	4300730571	HELPER ST A-14	SESW	11	14S	10E	State	ST UT ML 45805	Producing
134	4300730572	HELPER ST A-15	SENE	11	14S	10E	State	ST UT ML 45805	Producing
135	4300730573	HELPER ST E-1	SESW	36	13S	10E	State	ST UT ML 45802	Producing
136	4300730574	HELPER ST E-2	SWNW	36	13S	10E	State	ST UT ML 45802	Producing
137	4300730592	HELPER ST E-3	NENE	36	13S	10E	State	ST UT ML 45802	Producing
138	4300730597	CLAWSON SPRING ST A-1	SWSE	36	15S	8E	State	ST UT ML 46106	Producing
139	4300730598	HELPER ST E-4	SWSE	36	13S	10E	State	ST UT ML 45802	Producing
140	4300730603	HELPER ST A-16	SWSE	11	14S	10E	State	ST UT ML 45805	Producing
141	4300730635	CLAWSON SPRING ST A-2	NWNW	36	15S	8E	State	ST UT ML 46106	Producing
142	4300730636	CLAWSON SPRING ST A-3	NESW	36	15S	8E	State	ST UT ML 46106	Producing
143	4300730637	CLAWSON SPRING ST A-4	NWNE	36	15S	8E	State	ST UT ML 46106	Producing
144	4300730642	CLAWSON SPRING ST D-5	NENW	31	15S	9E	State	ML-48226	Producing
145	4300730643	CLAWSON SPRING ST D-6	SWSW	31	15S	9E	State	ML-48226	Producing
146	4300730644	CLAWSON SPRING ST D-7	NWNE	31	15S	9E	State	ML-48226	Producing
147	4300730701	CLAWSON SPRING ST D-8	NWSE	31	15S	9E	State	ML-48226	Producing
148	4300750070	HELPER STATE 12-3	SWNW	3	14S	10E	State	ST UT ML 45805	Producing
149	4300750071	HELPER STATE 32-3	SWNE	3	14S	10E	State	ST UT ML 45805	Producing
150	4300750072	HELPER STATE 32-36	SWNE	36	13S	10E	State	ST UT ML 45802	Producing
151	4301530391	UTAH 10-415	NENE	10	16S	8E	State	ST UT ML 48189	Temporarily-Abandoned
152	4301530392	CLAWSON SPRING ST E-7	SENE	7	16S	9E	State	ST UT ML 48220-A	Producing
153	4301530394	CLAWSON SPRING ST E-8	SWSE	7	16S	9E	State	ST UT ML 48220-A	Producing
154	4301530403	CLAWSON SPRING ST E-3	SENE	6	16S	9E	State	ST UT ML 48220-A	Producing
155	4301530404	CLAWSON SPRING ST E-1	SENE	6	16S	9E	State	ST UT ML 48220-A	Producing
156	4301530405	CLAWSON SPRING ST E-2	NESW	6	16S	9E	State	ST UT ML 48220-A	Producing
157	4301530406	CLAWSON SPRING ST E-4	NWSE	6	16S	9E	State	ST UT ML 48220-A	Producing
158	4301530410	CLAWSON SPRING ST C-1	SWNW	12	16S	8E	State	ST UT UO 48209	Producing
159	4301530427	CLAWSON SPRING ST B-1	NENW	1	16S	8E	State	ST UT ML 48216	Producing
160	4301530428	CLAWSON SPRING ST B-2	NWSW	1	16S	8E	State	ST UT ML 48216	Producing
161	4301530429	CLAWSON SPRING ST B-3	NWNE	1	16S	8E	State	ST UT ML 48216	Producing
162	4301530430	CLAWSON SPRING ST B-4	SESE	1	16S	8E	State	ST UT ML 48216	Producing
163	4301530431	CLAWSON SPRING ST B-5	SWSW	12	16S	8E	State	ST UT ML 48216	Producing
164	4301530432	CLAWSON SPRING ST B-8	SENE	11	16S	8E	State	ST UT ML 48216	Producing
165	4301530433	CLAWSON SPRING ST B-9	NWSE	11	16S	8E	State	ST UT ML 48216	Producing
166	4301530434	CLAWSON SPRING ST C-2	SENE	12	16S	8E	State	ST UT UO 48209	Producing
167	4301530435	CLAWSON SPRING ST C-4	SWNW	14	16S	8E	State	ST UT UO 48209	Producing
168	4301530460	CLAWSON SPRING ST B-7	NWSW	11	16S	8E	State	ST UT ML 48216	Producing



	API Well Number	Well Name	Qtr/Qtr	Section	Township	Range	Mineral Lease Type	Mineral Lease Number	Well Status
169	4301530461	CLAWSON SPRING ST C-6	SENE	14	16S	8E	State	ST UT UO 48209	Producing
170	4301530463	CLAWSON SPRING ST C-3	C-SE	12	16S	8E	State	ST UT UO 48209	Producing
171	4301530465	CLAWSON SPRING ST B-6	NENW	11	16S	8E	State	ST UT ML 48216	Producing
172	4301530466	CLAWSON SPRING ST H-1	NENW	13	16S	8E	State	ST UT ML 48217-A	Producing
173	4301530467	CLAWSON SPRING ST H-2	NENE	13	16S	8E	State	ST UT ML 48217-A	Producing
174	4301530470	CLAWSON SPRING ST E-5	NENW	7	16S	9E	State	ST UT ML 48220-A	Producing
175	4301530471	CLAWSON SPRING ST G-1	NWNW	2	16S	8E	State	ST UT ML 46314	Producing
176	4301530472	CLAWSON SPRING ST F-2	NESE	3	16S	8E	State	ST UT ML 48515	Producing
177	4301530473	CLAWSON SPRING ST F-1	SENE	3	16S	8E	State	ST UT ML 48514	Producing
178	4301530474	CLAWSON SPRING ST E-6	SESW	7	16S	9E	State	ST UT ML 48220-A	Producing
179	4301530475	CLAWSON SPRING ST G-2	NESW	2	16S	8E	State	ST UT ML 46314	Producing
180	4301530488	CLAWSON SPRING ST M-1	NWNE	2	16S	8E	State	ST UT ML 47561	Producing
181	4301530489	CLAWSON SPRING ST K-1	SESE	2	16S	8E	State	ST UT ML 46043	Producing